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TRANSACTIONS

OF THE

HISTORIC SOCIETY

OF

LANCASHIRE AND CHESHIRE.

VOLUME XII.

SESSION 1859-60.

LIVERPOOL:
ADAM HOLDEN, 48, CHURCH STREET.

1860.

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LIVERPOOL:
T. BRAKELL, PRINTER, COOK STREET.

This Volume has been edited by the Assistant Secretary, under the direction of the Council. The writers of Papers, however, are alone responsible for the facts and opinions contained in their respective communications.

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EXPLANATORY NOTE.

The Wood-cuts forming the Fourth, Fifth and Sixth Plates were engraved at the expense of Mr. Marsh, the Author of the Paper they illustrate. They were printed at the cost of the Society, who also wholly defrayed the expense of all the other Plates.

☞ Subjects of Papers to be read before the Society during the *Thirteenth Session*, will be advertised in the *Mercury* on the Tuesday, and in the *Daily Post* on the Wednesday, preceding each Meeting; and in the *Daily Times* on each day of Meeting.

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The HIGH SHERIFF OF CHESHIRE.	JOSEPH MAYER, F.S.A., &c.

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J. H. GENN, Esq., 9, Sugnall Street, Liverpool.

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* In accordance with Law XX, the Council added the three elected Vice-Presidents, the Librarian and Curator, to all the Sectional Committees.

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LIST OF MEMBERS.

SESSION XII, 1859-60.

The first List was dated 23rd November, 1848; all whose names appeared in it, are therefore Original Members. Those who have been enrolled as Mayors or Sheriffs have their year of office attached.

The letter P denotes that the Members in connexion with whose names it occurs, have read Papers before the Society.

Those whose names are printed in SMALL CAPITALS are Members of the Council; and in *italics* are Life Members.

Those marked thus * are Resident. The post town Liverpool is usually omitted.

A

23rd Nov., 1848. *Ainslie, Montague*, Grizedale, Hawkshead, Windermere.
1st Dec., 1859. Ainslie, P. B., F.S.S.A., Guildford.
6th Dec., 1855. *Allcard, William*, 43, Upper Brook street, Grosvenor square, London.
17th Dec., 1857. *Anderson, Thomas Darnley, 5, India buildings, Water street, and West Dingle, Dingle lane.
3rd May, 1849. *Anderson, Thomas Francis, Holly lodge, Fairfield, and 3, Cable street.
4th Dec., 1856. Ansdell, John, St. Helens.
23rd Nov., 1848. Ansdell, Richard, 7, Victoria road, Kensington, London.
15th Sept., 1854. Arrowsmith, P. R., The Ferns, Bolton.
2nd. Dec., 1858. Artingstall, George, Warrington.
P. 11th May, 1854. Aspland, Rev. R. Brook, M.A., Frampton villas, South Hackney, London.
14th Dec., 1848. *Astley, John, Philadelphia chambers, Hackin's hey, and Rock Ferry, Birkenhead.
P. 9th Oct., 1854. Atherton, Henry, Sutton, Prescot.
H. Sh. Cheshire, 1857. *Atkinson, William*, Ashton heyes, Chester.
23rd Nov., 1848. *AVISON, THOMAS, F.S.A., TREASURER, 18, Cook street, and Fulwood park, Aigburth.

B

8th June, 1854. *Banning, John Johnson, 20, Castle street.
12th Jan., 1860. *Bath, William H. P., 146, Crown street.
Mayor Man., 1851-53. Barnes, Robert, Brookside, Manchester.
P. 6th Dec., 1849. Beamont, William, Warrington.
21st May, 1857. *Bean, Edwin, Revenue buildings.
30th Dec, 1854. *Bean, William.
15th April, 1858. *Bell, Christopher, Back Goree.

23rd Nov., 1848. *Bell, Henry, Orange court, and Grosvenor road, Claughton, Birkenhead.
6th April, 1854. Bell, John Gray, 11, Oxford street, Manchester.
15th Nov., 1854. *Belshaw, John, Wason buildings, 4, Harrington street.
P. 9th Dec., 1852. Benn, Edward, Ballymena, Ireland.
23rd Nov., 1848. *Bennett, William, Sir Thomas's Buildings, and 109, Shaw street.
3rd Dec., 1857. *Berry, Percival, 7, Union Court.
15th April, 1858. *Berry, J. R.
7th March, 1850. Birch, Sir Thomas Bernard, Bart., The Hazles, Prescot.
23rd Nov., 1848. Birchall, Thomas, Ribbleton hall, Preston.
23rd Nov., 1848. *Bird, William, 9, South Castle street, and Wood hey, Spittal.
4th March, 1852. Birley, Rev. John Shepherd, Halliwell hall, Preston.
P. 8th Jan., 1852. Birley, T. Langton, Carr hill, Kirkham.
19th April, 1860. *Birnie, D. E., 53, Upper Warwick street.
6th Dec., 1855. Black, J., M.D., F.G.S., 2, George's square, Edinburgh.
23rd Nov., 1848. Blackburne, John Ireland, The Hall, Hale.
20th Sep., 1854. *Blackmore, William, 10, Water street, and Hooton, Cheshire.
20th Sept., 1854. Bloxam, Frederick William, F 3, Liverpool & London Chambers.
23rd Nov., 1848. *Blundell, Thomas Weld, Ince Blundell, Great Crosby.
P. 30th Dec., 1854. Bööck, Frederick Robert Paul, 86, Newman street, Oxford street, London.
5th May, 1853. Booth, Benjamin Witham, Swinton, Manchester.
1st May, 1856. Booth, John Billington, Preston, and Foxholes, near Lancaster.
15th Dec., 1853. Bossi, Arthur, Paris.
31st Sept., 1854. Bostock, Rev. H., M.A., Grammar School, Warrington.
3rd Jan., 1856. *Bouch, Thomas, 1, Oldhall street, and New Brighton.
23rd Nov., 1848. *Boult, Francis, Richmond buildings, and Devonshire road, Claughton.
P. 23rd Nov., 1848. *Boult, Joseph, North John street, and Parkfield road, Aigburth road.
8th Dec., 1851. Bourne, Cornelius, Stalmine hall, Preston.
15th April, 1858. *Bowers, Anthony, Vauxhall foundry.
6th Dec., 1855. Bowes, John, Blue Coat School, Warrington.
13th Nov., 1851. Brackstone, R. H., Lyncombe hill, Bath.
15th Dec., 1853. Bradbury, Charles, Salford crescent, Manchester.
17th Dec., 1857. *Bradley, Thomas, 52, Bold street, and 18, Kenyon terrace, Birkenhead.
17th Dec., 1857. *Bradley, William Gibson, 52, Bold street, and 18, Kenyon terrace, Birkenhead.
23rd Nov., 1848. *Brakell, Thomas, 7, Cook street, and 23, Richmond terrace, Everton.
Mayor Liv., 1848 9. *Bramley-Moore, John, Hon. Mem. Archæol. Association, Carioca Lodge, Aigburth, and Orange court, Castle street.
30th Dec., 1854. Brent, Francis, Custom house, Plymouth.
P. 9th March, 1854. *Bright, Henry Arthur, M.A., Sandheys, West Derby, and 1, North John street.
3rd May, 1849. Brooke, Henry, Forest hill, Northwich.
6th March, 1851. *Brooke, Richard, jun.*, Norton Priory, Runcorn.

13th Sept., 1854. *Brounlie, Charles, 19, Tower chambers.
23rd Sept., 1854. *Brown, John*, F.R.G.S., F.R.S North Antiq. Copenhagen, 3, Newcastle place, Clerkenwell, London.
6th Jan, 1853. *Brown, Rev. H. S.
15th April, 1858. Brown, Thomas.
23rd Nov., 1848. **Brown, William*, Richmond buildings, Chapel street, and Richmond hill, VICE-PRESIDENT.
15th March, 1855. *BROWNE, G. MANSFIELD, 15, South hill, Park road.
11th Sept, 1854. *BURKE, WILLIAM, 160, Grove street,
17th Sep., 1854. Burnell, Rev. Samuel, M.A., Winwick, Warrington.
Mayor Lan., 1853-4. Burrell, John Stamp, Lancaster.
P. 15th Dec., 1853. *BUXTON, DAVID, F.R.S.L., Principal of the Liverpool Deaf and Dumb Institution, Oxford street.

C

23rd Nov., 1848. *Caine, Nathaniel. 12, Dutton street.
3rd Dec., 1857. *Calder, Rev. William, M.A., Holly road, Fairfield.
1st Dec, 1859. Callender, W. Romaine, jun., Banff house, Rusholme, Manchester.
P. 6th Dec., 1855. Calvert, F Crace, Ph.Dr., F.R.S., F.C.S., M.R.A. Turin, Royal Institution, Manchester.
23rd Nov., 1848. *Campbell, Rev. Augustus, M.A., 131, Duke street, and The Vicarage, Childwall.
18th Dec., 1856. *Campbell, Captain William, R.L A.
4th April, 1850. *Carlisle, His Excellency The Earl of*, K.G., Castle Howard, Yorkshire, and The Castle, Dublin.
18th Dec., 1856. Cartwright, Samuel, Bushell place, Preston.
6th Dec., 1859. *Casson, William, 39, Parliament street, and 3, Great George square.
27th Sept., 1854. *Casey, George, Naylor street, and Walton.
26th Sept, 1854. *Cauty Henry John, 31, Norton street.
3rd Dec., 1857. *Chadburn, Charles Henry, 71, Lord street, and Egremont, Birkenhead.
15th April, 1858. *Chaloner, Thomas, 26, North John street, and College street South.
14th Sept., 1854. *Chantrell, G F., 150, Dale street.
H.Sh.Chesh., 1855-6. *Chapman, John*, Hill End, Mottram-in-Longdendale.
21st May, 1857. Cheetham, John, Eastwood, Stalybridge.
CHESHIRE, THE HIGH SHERIFF OF, VICE-PRESIDENT, *ex officio*.
2nd June, 1853. *Chester, The Lord Bishop of*, The Palace, Chester.
23rd Nov., 1858. *Clare, John Leigh, 11, Exchange buildings, and Richmond terrace, Brock road.
2nd Dec., 1858. Clarke, Rev. Joseph, M.A., R.D., Stretford, Manchester.
14th April, 1859. *Clement, Leonard*, Trinity terrace, Burnley.
17th Dec., 1857. Coates, Rev. W. H, West Kirby, Cheshire.
10th Nov., 1854. Colston, Rev. John, Quarry bank, Wilmslow, Manchester.
24th May, 1855. Comber, Thomas.
23rd Nov., 1848. *Conway, John, Cable street.
15th April, 1858. *Cooke, A., 8, Temple court.
15th April, 1858. *Cooke, Robert.
P. 15th April, 1858. *Corey, Charles.
18th Dec., 1856. Corser, Rev. Thomas, M.A., Stand, Manchester.

23rd Nov., 1848. *Bell, Henry, Orange court, and Grosvenor road, Claughton, Birkenhead.
6th April, 1854. Bell, John Gray, 11, Oxford street, Manchester.
15th Nov., 1854. *Belshaw, John, Wason buildings, 4, Harrington street.
P. 9th Dec., 1852. Benn, Edward, Ballymena, Ireland.
23rd Nov., 1848. *Bennett, William, Sir Thomas's Buildings, and 109, Shaw street.
3rd Dec., 1857. *Berry, Percival, 7, Union Court.
15th April, 1858. *Berry, J. R.
7th March, 1850. Birch, Sir Thomas Bernard, Bart., The Hazles, Prescot.
23rd Nov., 1848. Birchall, Thomas, Ribbleton hall, Preston.
23rd Nov., 1848. *Bird, William, 9, South Castle street, and Wood hey, Spittal.
4th March, 1852. Birley, Rev. John Shepherd, Halliwell hall, Preston.
P. 8th Jan., 1852. Birley, T. Langton, Carr hill, Kirkham.
19th April, 1860. *Birnie, D. E., 53, Upper Warwick street.
6th Dec., 1855. Black, J., M.D., F.G.S., 2, George's square, Edinburgh.
23rd Nov., 1848. Blackburne, John Ireland, The Hall, Hale.
20th Sep., 1854. *Blackmore, William, 10, Water street, and Hooton, Cheshire.
20th Sept., 1854. Bloxam, Frederick William, F 3, Liverpool & London Chambers.
23rd Nov., 1848. *Blundell. Thomas Weld, Ince Blundell, Great Crosby.
P. 30th Dec., 1854. Bööck, Frederick Robert Paul, 86, Newman street, Oxford street, London.
5th May, 1853. Booth, Benjamin Witham, Swinton, Manchester.
1st May, 1856. Booth, John Billington, Preston, and Foxholes, near Lancaster.
15th Dec., 1853. Bossi, Arthur, Paris.
31st Sept., 1854. Bostock, Rev. H., M.A., Grammar School, Warrington.
3rd Jan., 1856. *Bouch, Thomas, 1, Oldhall street, and New Brighton.
23rd Nov., 1848. *Boult, Francis, Richmond buildings, and Devonshire road, Claughton.
P. 23rd Nov., 1848. *Boult, Joseph, North John street, and Parkfield road, Aigburth road.
8th Dec., 1851. Bourne, Cornelius, Stalmine hall, Preston.
15th April, 1858. *Bowers, Anthony, Vauxhall foundry.
6th Dec., 1855. Bowes, John, Blue Coat School, Warrington.
13th Nov., 1851. Brackstone, R. H., Lyncombe hill, Bath.
15th Dec., 1853. Bradbury, Charles, Salford crescent, Manchester.
17th Dec., 1857. *Bradley, Thomas, 52, Bold street, and 18, Kenyon terrace, Birkenhead
17th Dec., 1857. *Bradley, William Gibson, 52, Bold street, and 18, Kenyon terrace, Birkenhead.
23rd Nov., 1848. *Brakell, Thomas, 7, Cook street, and 23, Richmond terrace, Everton.
Mayor Liv., 1848 9. *Bramley-Moore, John, Hon. Mem. Archæol. Association, Carioca Lodge, Aigburth, and Orange court, Castle street.
30th Dec., 1854. Brent, Francis, Custom house, Plymouth.
P. 9th March, 1854. *Bright, Henry Arthur, M.A., Sandheys, West Derby, and 1, North John street.
3rd May, 1849. Brooke, Henry, Forest hill, Northwich.
6th March, 1851. *Brooke, Richard, jun.*, Norton Priory, Runcorn.

4th Nov., 1858. *Evans, Edward Francis, Church road, Stanley.
15th Sep., 1854. *Evans, H. Sugden, F.C.S., 52A, Hanover street.
8th Nov., 1849. *Evans, Thomas Bickerton, 52A, Hanover street.
23rd Nov., 1848. *Ewart, Joseph Christopher, M.P., 64, Pall Mall, London, and New Brighton.
6th May, 1852. *Ewart, William*, M.P., 6, Cambridge square, Hyde Park, London, and Broadleas, Devizes.

F

3rd Dec., 1857. Fairbairn, William, F.R.S., Manchester.
11th Sept., 1854. Ferguson, William, F.L.S., F.G.S., F.R.G.S.
23rd Nov., 1848. *Finlay, William, Collegiate Institution.
15th April, 1858. *Foard, J. T.
15th April, 1828. FORREST, J. A., 58, Lime street, and 8, Cleveland street, Birkenhead.
5th Dec., 1850. *Forster, Wilson, New Ferry terrace, Rock Ferry, and 36, Dale street.
23rd Sept., 1854. *Forwood, T. B., The Hollies, Fairfield.
7th May, 1857. *Frackelton, Rev. S. S.*, M.A., Ballynahinch, Ireland.
15th Dec., 1853. Franks, Augustus Wollaston, M.A., F.S.A., British Museum, London.
6th Jan., 1853. *French, Gilbert James*, F.S.A., Corr. Mem. S.A. Scot., Bolton.
7th Jan., 1858. Frost, Meadows, 25, Albany, Oldhall street, and Chester.

G

14th Dec., 1848. *Gardner, Richard Cardwell, Colonial buildings, 34, Dale street, and Newsham house.
15th Dec., 1853. *Gardiner, Rev. Thomas, M.A., Stanley.
3rd May, 1849. Garnett, Wm. Jas., M.P., Bleasdale tower, Garstang.
23rd Nov., 1848. *Gaskell, John Booth, Exchange court, Exchange street East.
7th Feb., 1859. *Gath, Samuel, 45, Shaw street, Everton.
18th Dec., 1856. *GERARD, HENRY, 10, Rumford place.
P. 20th Nov., 1856. *GIBSON, A. GRAIG, Lower Bebington, Birkenhead, CURATOR.
7th March, 1850. *Gill, Robert, 1, Chapel street, and Much Woolton.
3rd Dec., 1857. Gleadowe, Rev. R. W., A.M., Neston Vicarage, Cheshire.
15th April, 1858. *Glover, John, 26, Hanover street.
9th Dec., 1852. Graves, Samuel Robert, 13, Redcross street.
7th Feb., 1850. *Gray, John, 25, Strand street, and 16, St. Clement's terrace, Windsor.
21st Sept., 1854. Gray, Rev. R. H., M.A., Kirkby, Prescot.
14th Dec., 1848. Gray, Thomas, Manager and Secretary, Unity Insurance Office, London.
6th Feb., 1851. Gray, William, M.P., Wheatfield, Bolton.
2nd Dec., 1858. *Greame, Malcolm, Colonial buildings, Dale street.
16th Sept., 1854. Green, Thomas, Richmond buildings, Chapel street.
23rd Nov., 1848. Greenall, Rev. Richard, M.A., Incumbent of Stretton, R. D., Stretton, Warrington.
16th Sept., 1854. Greene, John Stock Turner, Myddleton Hall, Warrington.

31st Aug., 1854. Grenside, Rev. William Bent, M.A., Melling Vicarage, Lancaster.
19th March, 1857. *Grimmer, W. Henry, Delta Chambers, Cable street.
3rd Dec., 1857. Grosvenor, Rev. Francis, M.A., St. John's, Chester.
8th Nov., 1849. *Guyton, Joseph, 163, Falkner terrace, Upper Parliament street.

H

21st May, 1857. *Hall, Charlton R., 18, Dale street, and Liscard castle, Birkenhead.
Mayor Lan., 1852-53. Hall, John.
10th Dec., 1857. *Hancock, Thomas S., Birkenhead.
15th April, 1858. *Harding, J., Revenue buildings, and Ashfield house, Holt hill, Birkenhead.
P. 6th March, 1856. Hardwick, Charles, Preston, and 100, City road, Manchester.
P. 20th Nov., 1854. Harland, John, F.S.A.
5th May, 1853. Harrison, William, Rock mount, St. John's, Isle of Man.
12th Jan., 1854. *Harrison, William*, F.G.S., &c., Galligreaves house, Blackburn.
9th Dec., 1852. *Harrison, Henry Walter, 27, Castle street.
9th Feb., 1854. *Harrowby, The Earl of*, D.C.L., F.R.S., Sandon hall, Staffordshire, and 39, Grosvenor square, London.
23rd April, 1857. *Hartington, The Marquess of*, M.P., Chatsworth, Derbyshire, and Devonshire house, London.
10th Feb., 1853. **Hartley, John Bernard*, The Grove, Allerton, and Dock Yard, South quay, Coburg Dock.
P. 11th Oct., 1854. *Hartnup, J., F.R.A.S., Observatory.
16th Dec., 1858. Hausburg, Leopold Promoli, London.
23rd Nov., 1848. Hawkins, Edward, F.R.S, V.P.S.A., F.L.S., British Museum, London.
3rd May, 1849. *Hay, John.
27th Sept., 1854. *Healey, Samuel R., 48, Castle street, and Westbank, Woolton.
23rd Nov., 1848. *Heath, Edward, Orange court, Castle street, and San Domingo grove, Everton.
24th Oct, 1854. Heginbottom, George, Albert terrace, Ashton-under-Lyne.
11th May, 1854. Henderson, Ebenezer, LL.D., Greenbank, St. Helens.
8th May, 1856. *Henderson, William, 41, Church street.
23rd Nov., 1848. *Herdman, William Gawin, West villa, San Domingo vale, Everton.
23rd Nov., 1848. *Heywood, James*, F.R.S, F.S.A., F.G.S., 26, Kensington Palace gardens, London. W.
23rd Nov, 1848. *Heywood, Sir Benjamin*, Bart., F.R.S., F.S.S., Claremont, Manchester.
P. 23rd Nov., 1848. *Heywood, Thomas*, F.S.A., Hope end, Ledbury, Herefordshire.
3rd April, 1856. Hibbert, Joseph, Brookbank, Hyde, Cheshire.
P. 4th Jan., 1849. *Hibbert, Thomas Dorning, 19, Sackville street, Everton.
P. 23rd Nov., 1848 *Higgin, Edward, Sweeting street.
P. 12th Sept., 1854. Higgins, Rev. Henry H., M A., Rainhill.
P. 23rd Nov., 1848. Hill, Rev. John Wilbraham, M.A., Waverton, Cheshire.

P. 21st Sept., 1854. *Hill, Samuel, 17, Sweeting street.
26th April, 1855. Hinde, Rev. Edmund, M.A.
P. 8th Dec., 1851. Hinde, John Hodgson, 9, Saville row, Newcastle-upon-Tyne, and Acton house, Felton, Northumberland.
22rd Sept., 1854. *Hindmarsh, Fred.*, F.G.S, F.R G.S, Bucklersbury, London.
1st Dec., 1859. *Hodgkin, John Elliot, Hayman's green, West Derby.
12th Jan., 1860. *Holden, Adam, 48, Church street
18th Dec., 1856. *Holden, Thomas*, Springfield, Bolton.
9th Feb., 1860. *Holt, George E., 3, Union Court.
24th Sept., 1854. *Holt, William D., 23, Edge hill.
10th May, 1860. *Hornby, Gerard, 177, Breck road, and 36, South Castle street.
20th Sept., 1855. *Horner, Francis, 33, Everton road.
7th May, 1857. *Horner, W., 34, South Castle street, and Eldon house, Oxton.
23rd Nov., 1848. *Horsfall, Thomas Berry, M.P., Bellamore hall, Staffordshire.
14th April, 1853. **Houghton, Richard H., jun.*, Sandheys, Waterloo.
4th Dec., 1856. *Howell, Edward, 6, Church street.
P. 8th Nov., 1849. *Howson, Rev. John Saul, M.A., Principal of the Collegiate Institution, Vice-President.
Mayor Lan, 1849-50. Howitt Thomas.
27th Sept, 1854. *Hubback, Joseph, 27, Lower Castle street, and Aigburth.
P. 10th Dec., 1857. *Hughes, John R., 21, Clevedon street, Park road.
14th Sep., 1854. *Hughes, Joseph, 2, Upper Duke street, and 9, Brownlow hill.
16th Sept., 1854. *Hughes, J. B., 77, Mill street, and 4, Clayton square.
6th April, 1854. Hughes, Thomas, 4, Paradise row, Chester.
8th Feb., 1852. Hulton, William Adams, Hurst Grange, Preston.
Mayor Ch., 1851-52. Humberston, Phillip Stapleton, M.P., Chester.
P 23rd Nov., 1848. *Hume, Rev. Abraham, D.C.L., LL D., F.S.A., Corr. Mem. S.A. Scot., 24, Clarence street, Everton, Hon. Secretary.
21st May, 1857. Hume, Hamilton, Cooma, Yass, New South Wales.
6th Jan., 1859. Hunt, Richard, 9, Castle street, and San Domingo vale, Breck road North.
9th Dec., 1853. *Hutchison, Robert, 12, Sweeting street, and 6, Canning street.

I

9th Oct., 1854. Ingham, Rev. Thomas Barker, M.A., Rainhill.

J

1st April, 1852. *Jacob, John Gibborn, 56, Church street.
23rd Nov., 1848. Jacson, Charles R., Barton Lodge, Preston.
15th April, 1858. *Jago, J. R.
21st May, 1857. *Jeffery, James Reddecliff, 45, Church street, and 11, Lodge lane.
23rd Nov., 1854. *Jeffery, William Reddecliff, 45, Church street, and 15, Deane street.
18th Sept., 1854. *Johnson, Henry, Rice lane, Walton.
23rd Nov., 1848. Johnson, John H., 7, Church street, and Southport.

11th Dec., 1856. Jones, W. Hope, Hooton, Cheshire.
23rd Sept., 1854. Jones, Edward, The Larches, Handsworth.
3rd May, 1849. *Jones, Morris Charles, 75, Shaw street.
2nd Dec., 1858. *Jones, Robert, 7, Batchelor street.
6th Dec., 1849. *Jones, Roger Lyon, 1, Great George square.
15th Sep., 1854. Jones, Thomas, B.A., Chetham Library, Manchester.

K

23rd Nov., 1848. *Kendall, Thomas, Green lane, Wavertree.
P. 3rd May, 1849. Kendrick, James, M.D., Warrington.
11th Dec., 1856. Kershaw, James, M.P., Oaklands, Victoria park, Manchester.
2nd Dec., 1858. Kirkes, Capt., D.L.O., Moorlands, Lancaster.
21st May, 1857. *Kitchen, Joseph, Oak house, West Derby.

L

14th March, 1852. *Lambert, David Howe, 10, Exchange chambers, Tithebarn street, and Rock Park, Rock Ferry.
LANCASHIRE, THE HIGH SHERIFF OF, VICE-PRESIDENT, *ex-officio*.
23rd Nov., 1848. Langton, William, Manchester.
21st Sept., 1854. *Lea, James, Surveyor, Egremont, Cheshire.
2nd Dec., 1858. *Leah, Rev. R., B.A.
2nd Dec., 1858. *Lee, James, Berkeley street.
23rd Nov., 1848. Legh, G. Cornwall, M.P., High Legh, Knutsford.
1st Dec., 1859. *Legh, W. J.*, M.P., Lyme park, Disley, Stockport.
10th Dec., 1857. *Leigh, Major Egerton*, The West hall, High Leigh, Knutsford.
15th April, 1858. *Leithead, H. F., Revenue buildings.
3rd Feb., 1859. *Leslie, George, 133, Upper Parliament street.
4th April, 1850. Lilford, The Lord, Oundle, Northamptonshire, and Grosvenor place, London.
4th March, 1858. Lindsay, The Lord, M.P., Haigh hall, Wigan.
23rd Nov., 1848. Lingard, Alexander Rowsand, Eastham.
Mayor Liv., 1851-52. *Littledale, Thomas, 13, Exchange buildings, and Highfield house.
*LIVERPOOL, THE MAYOR OF, VICE-PRESIDENT, *ex-officio*, (T. D. Anderson, Esq.)
14th Dec., 1848. *Lloyd, John Buck, 54, Castle street, and Aigburth.
6th Jan., 1853. *Longton, John, Peter's place, Rumford street, and Breck road.
P. 23rd Nov., 1848. *Lord, Lieut. William*, R.N., 8, North parade, Bath.
6th Dec., 1849. *Lyon, Thomas, Appleton hall, Warrington.

M

21st Sept., 1854. *MacIlveen, Alexander, Principal of the Liverpool Institute, Sandon terrace.
15th April, 1858. *McInnes, J., 21, Neptune street.
P. 3rd March, 1853. *Macintyre, Peter, M.D., 128, Duke street.
27th Sept., 1854. *Macfie, Robert Andrew, 30, Moorfields, and Ashfield hall, Neston.
21st May, 1857. M'Nicholl, David Hudson, M.D., Southport.

23rd Nov., 1848. *M'Quie, Peter Robinson, 14, Water street, and Low Hill.
5th May, 1853. **Macrae, John Wrigley*, 22, Hackin's hey, and Seaforth House, Seaforth.
6th Dec., 1849. *M'Viccar, Duncan, Abercromby square, and 7, Exchange buildings.
3rd Jan., 1849. *Manchester, The Lord Bishop of*, F.R.S., F.G.S., Mauldeth hall, Manchester.
23rd Nov., 1848. Markland, James Heywood, D.C.L., F.R.S., F.S.A., Bath.
23rd Nov., 1848. *Marsden, George, Vernon Priory, Edge hill.
1st Dec., 1859. Marsh, John, St. Helens.
P. 5th June, 1841. Marsh, John Fitchett, Fairfield house, Warrington.
1st Jan., 1857. Marshall, W., Penwortham hall, Preston.
9th March, 1854. *Mason, William Ithell, 14, Lower Hope place.
15th April, 1858. Mawdsley, H., Southport.
P. 23rd Nov., 1848. *Mayer, Joseph, F.S.A., M.R. Asiat. S., F.E.S., F R S. North. Ant. Copenhagen, Associé étranger de la Société Impériale des Antiquaires de France, Hon. Mem. SS. Antiq., Normandie, l'Ouest, and la Morinie, de la Sociétè d'Emulation d'Abbeville, &c., 68, Lord street, Vice-President.
17th Feb., 1850. Mayer Samuel, Newcastle-under-Lyne.
10th Feb., 1859. Meaden, Henry Peter, Haslingden.
24th May, 1855. Melling, Thomas, C.E., Rainhill.
15th April, 1858. *Mercer, Nathan, F.C.S., 7, Church street.
15th April, 1858. *Mercier, J. D., 34, Church street.
10th Feb., 1859. Mewburn, John, Union Bank, and Hale.
P. 6th Dec., 1849. Middleton, Captain James, F.S.A.
10th May, 1860. Mills, Robert, Shawclough, near Rochdale.
P. 31st Dec., 1854. *Milner, William, 322, Upper Parliament street, and Phœnix Safe Works, Windsor.
P. 1st Dec., 1859. *Mitchell, T. R., M.D., 14, Great George square.
3rd Dec., 1857. *Moore, Rev. Richard R., B.A., 28, Rupert lane, Everton.
P. 8th Nov., 1849. *Moore, Rev. Thomas, M.A., 65, Oxford street.
18th Dec., 1856. Moseley, Thomas Beeby.
15th April, 1858. *Moss, J. B., 34, West Derby street.
P. 23rd Nov., 1848. *Moss, Rev. John James, M.A., Upton, Cheshire.
7th March, 1850. *Mott, Albert J., Jackson chambers, South Castle street, and Holt hill, Birkenhead.
3rd Dec., 1857. *Moult, William, 21, Leigh street, and Knowsley.
21st May, 1857. *Mozley, Charles, Bronte House.
19th Sept., 1854. *Musker, Roger Melling, Walton.
11th Dec., 1856. Myres, John James, Bank parade, Preston.

N

H.S. Ches., 1857. *Naylor, Richard*, Hooton, Cheshire.
23rd Nov., 1848. *Neill, Hugh, F.R.A.S., L.R.C.P., 6, Abercromby square.
15th April, 1858. *Newlands, J., Public Offices, Cornwallis street.
P. 6th Dec., 1855. *Newton, John, M.R.C S., 13, West Derby street.
23rd Nov., 1848. Nicholson, James, F.S.A., Thelwall hall, Warrington.
29th Sept., 1854. *Nottingham, John, M.D., 18, Roscommon street.

O

2nd Jan., 1851. *Oates, Captain W. C.*, Cavendish place, Bath.
P. 6th Dec., 1849. Ormerod, George, D.C.L., F.R.S., F.S.A., F.G.S., Sedbury park, Chepstow.
6th Feb., 1851. Osborne, John James, Macclesfield.
3rd Jan., 1850. *Overend, James, 55, Hope street.
3rd Dec., 1857. Oxley, Frederick, 31, John street, Bedford row, London, W.C.

P

23rd Nov., 1848. *Paris, Thomas Jeremiah, 68, Lord street.
3rd Jan., 1850. *Parker, Charles Stewart, Bank chambers, Cook street.
18th Dec., 1856. Parker, Robert Townley, Cuerdon hall, Preston.
7th March, 1850. *Patten, John Wilson*, M.P., Bank hall, Warrington.
2nd Nov., 1854. Patterson, Andrew, Principal of the Deaf and Dumb Institution, Manchester.
9th Oct., 1854. *Peacock, John, 2, Chapel street.
6th Dec., 1849. Pearce, George Massie, Hackin's hey, and Ormskirk.
23rd Nov., 1848. Pedder, Edward, Ashton park, Preston.
11th Dec., 1856. *Pedder, Henry Newsham*, Preston.
23rd Nov., 1848. Pedder, Richard, Winckley square, Preston.
8th Dec., 1851. Perrin, Joseph, The Crescent, Levenshulme, Manchester.
P. 6th Jan., 1849. *Picton, James Allanson, F.S.A., Queen Insurance buildings, Dale street, and Sandyknowe, Wavertree.
3rd May, 1849. Pierpoint, Benjamin, St. Austin's, Warrington.
23rd Nov., 1848. Pilkington, James, M.P., Park place, Blackburn.
10th Feb., 1853. *Platt, Robert*, Dean Water, Handforth, Manchester.
6th Dec., 1849. *Poole, John, 23, Oxford street.
29th Dec., 1854. Porter, Rev. Jas., M.A., St. Peter's College, Cambridge.
9th Feb., 1860. *Powell, Charles, Commander, R.N., H.M.S., *Conway*, Rock Ferry.
12th March, 1857. *Preston, Geo. Theo. Robert, 13, Vernon street, Dale street, and Rock house, West Derby road.
6th Dec., 1849. *Preston William, 13, Vernon street, and Rock house, West Derby road.

R

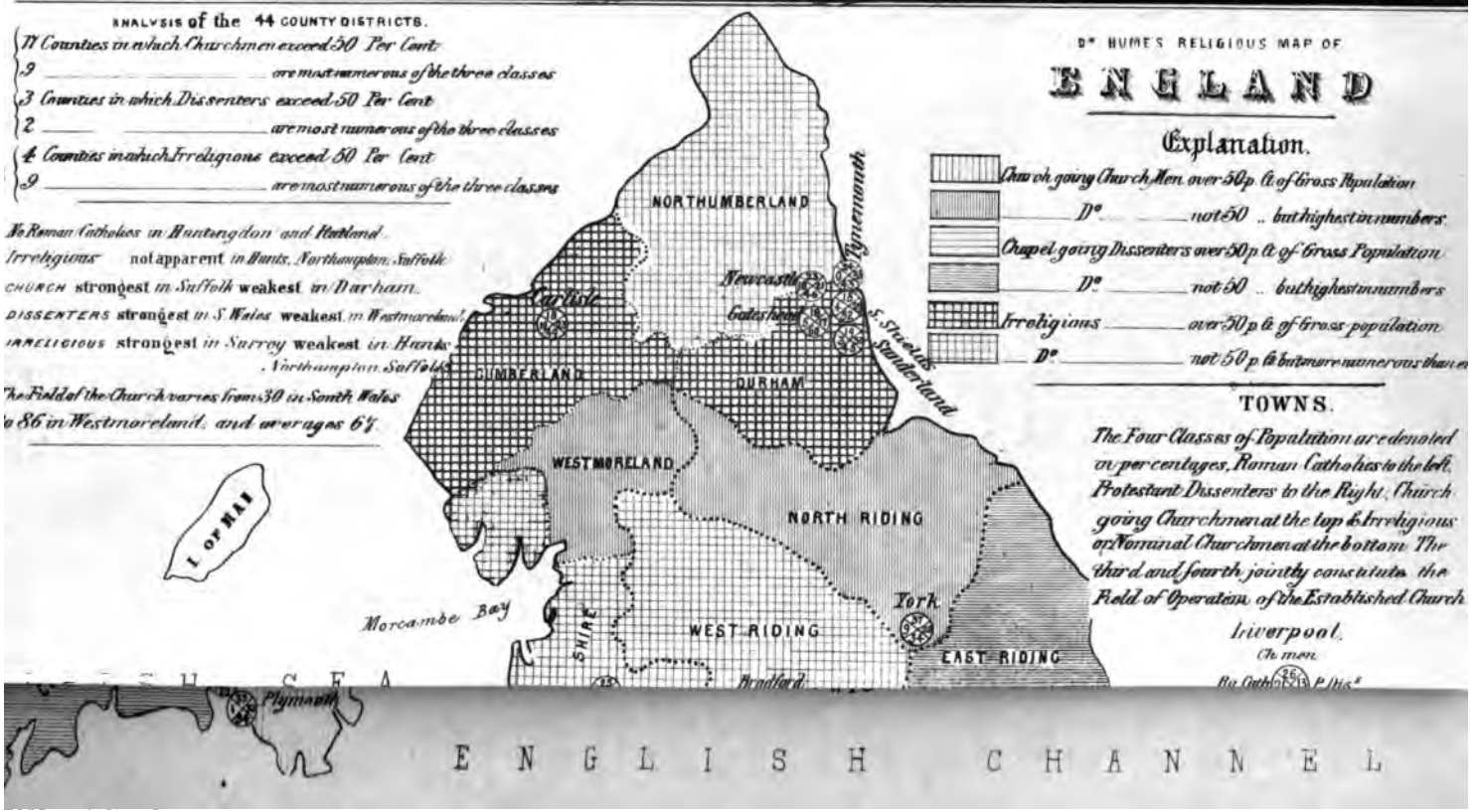
23rd Nov., 1848. Raines, Rev. Canon, M.A., F.S.A.
P. 18th Sept., 1854. *Ramsay, Rev. Arthur, M.A., Highfields, Eaton road, West Derby.
23rd Sept., 1854. *Rathbone, William, 24, Water street, and Greenbank, Wavertree.
15th March, 1849. Rawlinson, Robert, C.E., F.G.S., 34, Parliament street, Westminster, and 17, Ovington square, Brompton, London.
13th Sept., 1854. *Raynes, James Trevelyan, 37, Oldhall street, and Rock park, Rock Ferry.
23rd Nov., 1848. *Reay, James, Guardian office, Commerce court, Lord street.
23rd Nov., 1848. *Reay, Thomas, 87, Church street.
29th Dec., 1854. Rees, William, Old Trafford, Manchester.

14th Dec., 1848. *Robin, John, Chapel walks, South Castle street, and Grove hill, West Kirby, Birkenhead.
20th Dec., 1855. *Robin, Rev. P. R., M.A., Barnston, Birkenhead.
23rd Nov., 1848. *Robinson, Charles Backhouse, 12, Myrtle street, and Matilda grove, Aigburth.
11th Dec., 1856. *Robinson, Joseph.
P. 3rd May, 1849. Robson John, M.D., Warrington.
3rd Jan., 1850 *Ronald, Robert Wilson, 19, Dale street,
15th April, 1858. Rooke, Rev. W. J. E., Tunstal Vicarage, Kirkby Lonsdale.
15th April, 1858. Rowlandson, W., Kendal.
14th April, 1853. *Ryder, Thos. Bromfield, 2, Elliot st., Clayton square.
25th Sept., 1854. Rylands, Peter, Bewsey house, Warrington.
P 13th Dec., 1854. Rylands, Thomas Glazebrook, Warrington.

S

6th Dec., 1855. *Sandbach, W. R., Bank buildings, Cook street, and The Cottage, Aigburth.
P. 19th Sept., 1854. Sansom, Rev. John, B.A., Buslingthorpe Rectory, Market Rasen.
P. 7th Sept., 1851. *Sansom Thomas, A.L.S., F.B.S.E., 33, Everton road.
23rd Nov., 1848. *Scholfield, Henry D., M.D., 14, Hamilton square, Birkenhead.
8th Jan., 1852. Sharp, John, The Hermitage, Lancaster.
2nd June, 1853. *Sharp, William*, 102, Piccadilly, London.
23rd Nov., 1848. Sharpe, Edmund, M.A., Coedfa, Llanrwst, N. Wales.
1st Dec., 1855. *Shawe, J. R., Arrowe hall, Birkenhead.
7th Feb., 1850. *Sherlock, Cornelius, 22, King street.
11th Feb., 1858. *Shute, Arthur, 21, Water street.
23rd Nov., 1848. *Simpson, Rev. Samuel*, M.A., St. Thomas's Parsonage, Douglas, Isle of Man.
23rd Nov., 1848. Skaife, Thomas, Vanbrugh house, Blackheath, London.
2nd May, 1850. **Smith, James*, Brunswick Dock, and Seaforth.
30th Dec., 1854. *Smith, John Peter George.
16th Sept., 1854. Smith, John, Langley, near Macclesfield.
6th Jan., 1853. *Smith, William Penn, 26, Hanover street.
23rd Nov., 1848. *Snowball, J. G., 10, Castle street, and 11, Upper Canning street.
6th Nov., 1856. Sodor and Man, The Lord Bishop of, Bishop's court, Isle of Man.
2nd Nov., 1854. Stainer, William, Pavilion, Old Trafford, Manchester.
3rd Jan., 1856. *Staniforth, Rev Thomas*, Storrs, Windermere.
13th Dec., 1855. *Steiner, F.*, Hyndburn, Accrington.
1st Jan., 1856. *Steains, James, 35, North John street, and 56, Upper Kensington.
15th April, 1858. *Stevens, J., 166, Park road.
30th Dec., 1854. *Stewart, James Gordon, 3, West Derby street.
5th June, 1850. *Stock, John, 7, Exchange buildings, and Westdale, Wavertree.
8th Nov., 1849. *Stuart, William. 1, Rumford place, and Springfield house, Knotty Ash.
5th June, 1851. Stubs, Joseph, Park place, Frodsham.
25th Sept., 1854. *Sumners, Henry.

	8th Jan., 1852.	De Perthes, J. Boucher de Crevecœur, Chevalier des ordres de Malte et de la Légion d'honneur, membre de diverses Sociétés Savantes, Abbeville.
	6th Feb., 1851.	Duncan, Philip B., D.C.L., Oxford.
	27th Sept., 1854.	Gray, John Edward, Ph.D., F.R.S., F.L.S., V.P.Z.S., Pres. Entom. Soc., &c., British Museum, London.
P.	27th Sept., 1854.	Latham, R. Gordon, M.D., F.R.S, Greenford, Middlesex.
	9th Dec., 1852.	MacAdam, Robert, 18, College square, Belfast.
	27th Sept, 1854.	Murchison, Sir Roderick Impey, G.C.St.S., M.A., D.C.L., F.R.S., V.P.L.S., F.G.S., V.P.R.Geogr.S., Hon.M.R.I.A., Director-General of the Geological Survey of Great Britain and Ireland; Trust. Brit. Mus.; Hon Mem. Acadd. St. Petersburg, Berlin, Copenhagen; Corr. Mem. Inst. France, &c., 16, Belgrave square, London.
	27th Sept., 1854.	Owen, Richard, M.D., LL.D., F.R.S., F.L.S., F.G.S., British Museum, London.
P.	7th May, 1851.	Pidgeon, Henry Clarke, 3, Westbourne villas, Harrow road, London.
	27th Sept., 1854.	Phillips, John, M.A., LL.D., F.R.S., Pres. Geol. Soc., Reader in Geology, Oxford.
	27th Sept., 1854.	Rosse, The Earl of, K.P., D.C.L., F.R.S., F.S.A., F.R.A.S., F.G.S., Birr Castle, Parsonstown, Ireland.
	27th Sept., 1854.	Sabine, Major-General Edward, R.A., D.C.L., Treas. and V.P.R.S., F.R.A.S., 13, Ashley place, Victoria street, London, and Woolwich.
	27th Sept., 1854.	Sedgwick, Rev. Adam, M.A., F.R.S., F.G.S., F.R.A.S., Hon. M.R.I.A., Woodwardian Professor, Trinity College, Cambridge.
P.	6th Feb., 1851.	Smith, Charles Roach, F.S.A., Member of the Roy. Soc. North. Antiq. Copenhagen; Hon. Mem. SS. Antiq. France, Normandy, Scotland, Spain, Newcastle, the Morinie, Abbeville, Picardy, Wiesbaden, Luxemburg, Treves, Touraine, &c., Temple place, Strood, Kent.
	6th Feb., 1851.	Turnbull, William B., F.S.A. Scot., 3, Stone buildings, Lincoln's Inn, London.
	27th Sept., 1854.	Whewell, Rev. William, D.D., F.R.S., F.G.S., F.R.A.S., Hon. M.R.I.A., Corr. Member of the Institute of France, Master of Trinity College, Cambridge.
	6th Feb., 1851.	Williams, Rev. John, M.A., Llanymowddy, Dinas Mowddwy, Shrewsbury.
	6th Feb., 1851.	Willis, Rev. Robert, M.A., F.R.S., Jacksonian Professor, Cambridge, and 23, York terrace, Regent's park, London.
P.	27th Sept., 1854.	Wright, Thomas, M.A., F.S.A., Hon. M.R.S.L., Member of the Institute of France; of the Roy. Soc. Northern Antiqs. Copenhagen; Hon. Mem. of the Soc. of Antiquaries of France; Corresp. Mem. Soc. Antiq. Normandy; of Soc. Antiqs. Scotland; &c., 14, Sydney street, Brompton, London.



CHALONER & LAWSON LITH. 56 ELDON ST LIVERPOOL

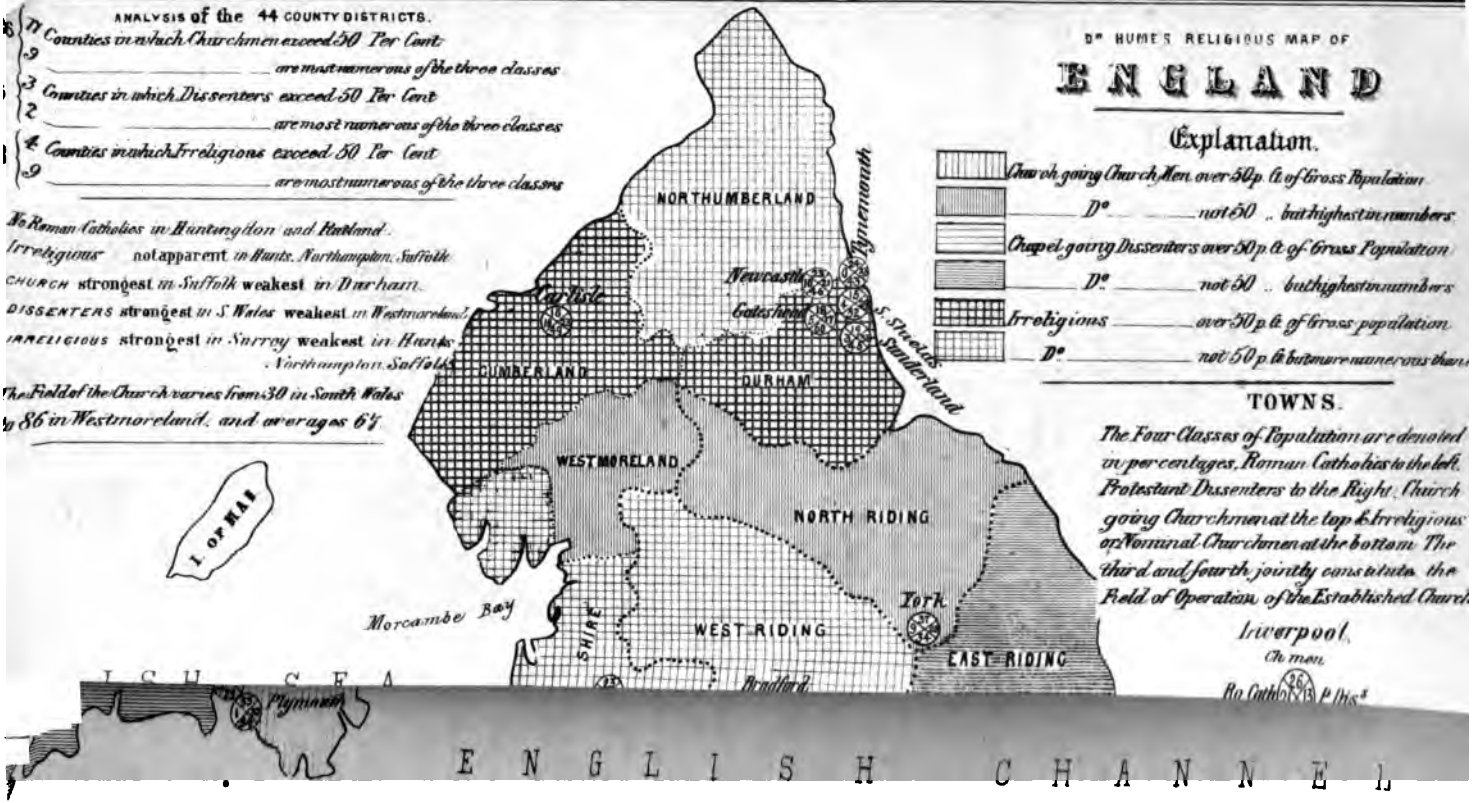
	2nd May, 1850.	*Way, Albert*, M.A., F.S.A., Wonham manor, Reigate, Surrey.
	1st Feb., 1849.	*Webster, George, 6, York buildings, Dale street, and Mosley hill, Aigburth.
P.	3rd Jan., 1856.	*Welton, Thos. A.*, F.S.S., 147, Fenchurch street, London.
	2nd June, 1853.	*Whitley, George, 5, Clayton square, and Bromborough.
	9th Oct., 1854.	Whitley, Rev. John, M.A., Newton rectory, Warrington.
	6th June, 1850.	Whitley, Rev. William, B.A., Catsclough, Winsford, Cheshire.
P.	30th Nov., 1854.	Wilkinson, Thomas Turner, F.R.A.S., Corr. Mem. Lit. and Phil. Soc. Manch., Burnley.
	8th Jan., 1852.	*Willoughby, Edward G., Marine Cottage, Tranmere.
	6th Dec., 1855.	Wilson, G., F.R.S., Belmont, Vauxhall, London.
	23rd Nov., 1848.	Wood, Venerable Isaac, M.A., Archdeacon of Chester, Newton, near Middlewich.
	23rd Nov., 1848.	Wood, Isaac Moreton, M.A., Newton, near Middlewich.
	9th Feb., 1854.	Wood, Samuel, F.S.A., The Abbey, Shrewsbury.
	10th Feb., 1853.	*Wood, Thomas, B.A., Blue Coat Hospital.
	7th May, 1851.	**Woodhouse, John George*, 117, Henry street.
	30th Dec., 1854.	Worthy, George Smith, Bristol.

HONORARY MEMBERS.

	6th Feb., 1851.	Akerman, John Yonge, Sec. S.A.; Hon. M.R.S.L.; F.S.A. Newcastle; F.R.S. of Northern Antiquities; Corr. Mem. SS. Antiq. Scot. France, Russia, Switzerland, Rome; Hon. Mem. Roy. Acad., Stockholm; Somerset House, London.
	27th Sept., 1854.	Babington, Charles Cardale, M.A., F.R.S., F.L.S., Sec. C.P.S., St. John's College, Cambridge.
P.	13th Nov., 1851.	Bell, William, Ph.D., 31, Burton street, Burton crescent, London.
	6th Feb., 1851.	Blauw, William Henry, M.A., F.S.A., Beechland, Uckfield.
	6th Feb., 1851.	Boileau, Sir John P., Bart., F.R.S., F.S.A., Ketteringham hall, Wyndham, Norfolk, and 20, Upper Brook street, Grosvenor square, London.
	27th Sept., 1854.	Brewster, Sir David, K.H., D.C.L., LL.D., F.R.SS.L. and E., Hon. M.R.I.A., St. Andrews, N.B., and Allerby, Roxburghshire.
	6th Feb., 1851.	Charlton, Edward, M.D., F.S.A. Newc., 7, Eldon square, Newcastle-upon-Tyne.
P.	1st Feb., 1855.	Clarke, Joseph, F.S.A., Saffron Walden, Essex.
	19th May, 1859.	Cochet, M. L'Abbé, Inspector of Antiquities and Monuments in Normandy, Dieppe.

	8th Jan., 1852.	De Perthes, J. Boucher de Crevecœur, Chevalier des ordres de Malte et de la Légion d'honneur, membre de diverses Sociétés Savantes, Abbeville.
	6th Feb., 1851.	Duncan, Philip B., D.C.L., Oxford.
	27th Sept., 1854.	Gray, John Edward, Ph.D., F.R.S., F.L.S., V.P.Z.S., Pres. Entom. Soc., &c., British Museum, London.
P.	27th Sept., 1854.	Latham, R. Gordon, M.D., F.R.S, Greenford, Middlesex.
	9th Dec., 1852.	MacAdam, Robert, 18, College square, Belfast.
	27th Sept, 1854.	Murchison, Sir Roderick Impey, G.C.St.S., M.A., D.C.L., F.R.S., V.P.L.S., F.G.S., V.P.R.Geogr.S., Hon.M.R.I.A., Director-General of the Geological Survey of Great Britain and Ireland; Trust. Brit. Mus.; Hon Mem. Acadd. St. Petersburg, Berlin, Copenhagen; Corr. Mem. Inst. France, &c., 16, Belgrave square, London.
	27th Sept., 1854.	Owen, Richard, M.D., LL.D., F.R.S., F.L.S., F.G.S., British Museum, London.
P.	7th May, 1851.	Pidgeon, Henry Clarke, 3, Westbourne villas, Harrow road, London.
	27th Sept., 1854.	Phillips, John, M.A., LL.D., F.R.S., Pres. Geol. Soc., Reader in Geology, Oxford.
	27th Sept., 1854.	Rosse, The Earl of, K.P., D.C.L., F.R.S., F.S.A., F.R.A.S., F.G.S., Birr Castle, Parsonstown, Ireland.
	27th Sept., 1854.	Sabine, Major-General Edward. R.A., D.C.L., Treas. and V.P.R.S., F.R.A.S., 13, Ashley place, Victoria street, London, and Woolwich.
	27th Sept., 1854.	Sedgwick, Rev. Adam, M.A., F.R.S., F.G.S., F.R.A.S., Hon. M.R.I.A., Woodwardian Professor, Trinity College, Cambridge.
P.	6th Feb., 1851.	Smith, Charles Roach, F.S.A., Member of the Roy. Soc. North. Antiq. Copenhagen; Hon. Mem. SS. Antiq. France, Normandy, Scotland, Spain, Newcastle, the Morinie, Abbeville, Picardy, Wiesbaden, Luxemburg, Treves, Touraine, &c., Temple place, Strood, Kent.
	6th Feb., 1851.	Turnbull, William B., F.S.A. Scot., 3, Stone buildings, Lincoln's Inn, London.
	27th Sept., 1854.	Whewell, Rev. William, D.D., F.R.S., F.G.S., F.R.A.S., Hon. M.R.I.A., Corr. Member of the Institute of France, Master of Trinity College, Cambridge.
	6th Feb., 1851.	Williams, Rev. John, M.A., Llanymowddy, Dinas Mowddwy, Shrewsbury.
	6th Feb., 1851.	Willis, Rev. Robert, M.A., F.R.S., Jacksonian Professor, Cambridge, and 23, York terrace, Regent's park, London.
P.	27th Sept., 1854.	Wright, Thomas, M.A., F.S.A., Hon. M.R.S.L., Member of the Institute of France; of the Roy. Soc. Northern Antiqs. Copenhagen; Hon. Mem. of the Soc. of Antiquaries of France; Corresp. Mem. Soc. Antiq. Normandy; of Soc. Antiqs. Scotland; &c., 14, Sydney street, Brompton, London.

	8th Jan., 1852.	De Perthes, J. Boucher de Crevecœur, Chevalier des ordres de Malte et de la Légion d'honneur, membre de diverses Sociétés Savantes, Abbeville.
	6th Feb., 1851.	Duncan, Philip B., D.C.L., Oxford.
	27th Sept., 1854.	Gray, John Edward, Ph.D., F.R.S., F.L.S., V.P.Z.S., Pres. Entom. Soc., &c., British Museum, London.
P.	27th Sept., 1854.	Latham, R. Gordon, M.D., F.R.S, Greenford, Middlesex.
	9th Dec., 1852.	MacAdam, Robert, 18, College square, Belfast.
	27th Sept, 1854.	Murchison, Sir Roderick Impey, G.C.St.S., M.A., D.C.L., F.R.S., V.P.L.S., F.G.S., V.P.R.Geogr.S., Hon.M.R.I.A., Director-General of the Geological Survey of Great Britain and Ireland; Trust. Brit. Mus.; Hon Mem. Acadd. St. Petersburg, Berlin, Copenhagen; Corr. Mem. Inst. France, &c., 16, Belgrave square, London.
	27th Sept., 1854.	Owen, Richard, M.D., LL.D., F.R.S., F.L.S., F.G.S., British Museum, London.
P.	7th May, 1851.	Pidgeon, Henry Clarke, 3, Westbourne villas, Harrow road, London.
	27th Sept., 1854.	Phillips, John, M.A., LL.D., F.R.S., Pres. Geol. Soc., Reader in Geology, Oxford.
	27th Sept., 1854.	Rosse, The Earl of, K.P., D.C.L., F.R.S., F.S.A., F.R.A.S., F.G.S., Birr Castle, Parsonstown, Ireland.
	27th Sept., 1854.	Sabine, Major-General Edward, R.A., D.C.L., Treas. and V.P.R.S., F.R.A.S., 13, Ashley place, Victoria street, London, and Woolwich.
	27th Sept., 1854.	Sedgwick, Rev. Adam, M.A., F.R.S., F.G.S., F.R A.S., Hon. M.R.I.A., Woodwardian Professor, Trinity College, Cambridge.
P.	6th Feb., 1851.	Smith, Charles Roach, F.S.A., Member of the Roy. Soc. North. Antiq. Copenhagen; Hon. Mem. SS. Antiq. France, Normandy, Scotland, Spain, Newcastle, the Morinie, Abbeville, Picardy, Wiesbaden, Luxemburg, Treves, Touraine, &c., Temple place, Strood, Kent.
	6th Feb., 1851.	Turnbull, William B., F.S.A. Scot., 3, Stone buildings, Lincoln's Inn, London.
	27th Sept., 1854.	Whewell, Rev. William, D.D., F.R.S., F.G.S., F.R.A.S., Hon. M.R.I.A., Corr. Member of the Institute of France, Master of Trinity College, Cambridge.
	6th Feb., 1851.	Williams, Rev. John, M A., Llanymowddy, Dinas Mowddwy, Shrewsbury.
	6th Feb., 1851.	Willis, Rev. Robert, M.A., F.R.S., Jacksonian Professor, Cambridge, and 23, York terrace, Regent's park, London.
P.	27th Sept., 1854.	Wright, Thomas, M.A., F.S.A., Hon. M.R.S.L., Member of the Institute of France; of the Roy. Soc. Northern Antiqs. Copenhagen; Hon. Mem. of the Soc. of Antiquaries of France; Corresp. Mem. Soc. Antiq. Normandy; of Soc. Antiqs. Scotland; &c., 14, Sydney street, Brompton, London.


ANALYSIS of the 44 COUNTY DISTRICTS.
11 Counties in which Churchmen exceed 50 Per Cent
9 ____ are most numerous of the three classes
3 Counties in which Dissenters exceed 50 Per Cent
2 ____ are most numerous of the three classes
4 Counties in which Irreligions exceed 50 Per Cent
9 ____ are most numerous of the three classes
No Roman Catholics in Huntingdon and Rutland.
Irreligious not apparent in Hunts. Northampton. Suffolk
CHURCH strongest in Suffolk weakest in Durham.
DISSENTERS strongest in S. Wales weakest in Westmoreland.
IRRELIGIOUS strongest in Surrey weakest in Hunts
Northampton. Suffolk
The Field of the Church varies from 30 in South Wales
to 86 in Westmoreland, and averages 64.
Dr HUME'S RELIGIOUS MAP OF
ENGLAND
Explanation.
Church going Church Men over 50 p. Ct of Gross Population
Dº ____ not 50 .. but highest in numbers
Chapel going Dissenters over 50 p. Ct of Gross Population
Dº ____ not 50 .. but highest in numbers
Irreligions ____ over 50 p. Ct of Gross population
Dº ____ not 50 p. Ct but more numerous than
TOWNS.
The Four Classes of Population are denoted in per centages, Roman Catholics to the left, Protestant Dissenters to the Right, Church going Churchmen at the top & Irreligious or Nominal Churchmen at the bottom. The third and fourth jointly constitute the Field of Operation of the Established Church
Liverpool,
Ch men
Ro Cath
NORTHUMBERLAND
Tynemouth
Newcastle
Gateshead
S. Shields
Sunderland
Carlisle
CUMBERLAND
DURHAM
WESTMORELAND
NORTH RIDING
I. OF MAN
Morecambe Bay
SHIRE
WEST RIDING
York
EAST RIDING
Bradford
Plymouth
E N G L I S H C H A N N E L

TRANSACTIONS.

REMARKS ON THE CENSUS OF RELIGIOUS WORSHIP FOR ENGLAND AND WALES.

By the Rev. A. Hume, D.C.L., &c.

(Read 12th January, 1860.)

I.—Introduction.

It will be admitted, pretty generally, that the subject of Ecclesiastical statistics is a difficult and delicate one. Each religious body looks at facts through a medium of its own interposing; and each is anxious to show its importance by its numbers. With a few understood exceptions, the smaller the body, the greater is the anxiety on this subject: for any given number,—say 1,000 or 10,000,—forms a large fractional part of a small community, but is inappreciable in a very large one.

As a matter of course, the subject is sometimes made controversial, when in reality it belongs to numerical inquiries which demand the calmest investigation: and it is a common practice to put forward one aspect of the subject only,—viz. that which is most favourable to the views of the speaker or writer,—and to omit, designedly, all that is contradictory or corrective. Thus, errors and prejudices are increased; and truth, when found at all, is reached by slow and difficult steps, instead of with speed and facility. It is well known, that one of the most dexterous modes of propagating error is to state a truth partially, or to omit one or more facts of a set: so that every word spoken or written may be strictly true, so far as it goes, and every idea conveyed may be absolutely false. This may be done in numerical inquiries as well as in others, by merely dropping some indispensable element, by ignoring some condition of the question, without which a correct solution is impossible.

In ordinary circumstances, I should shrink from an inquiry with which the interests and passions of men are so much bound up; and sometimes also their party feelings. The present occasion is, however, exceptional. The subject is important in itself, and it assumes increasing interest at the moment when we begin to prepare for another decennial census. The

errors of the last one, however few they may be, and trifling when compared with its general importance, should be rectified; so that with the growth of experience, the statements may become more and more reliable. Besides, I have given much attention to the subject; I have been identified with it in some respects; and I have had attributed to me the merit of certain calculations to which I can lay no claim. An investigation like the present appears suited for a Statistical Society, or for the Statistical section of a large Society; and as that subject is embraced in the Literary section of our own, it is quite in place here.

One of the first attempts, if not the very first, at an Ecclesiastical census, was made in Ireland in 1834. The duty was entrusted to the Commissioners of Public Instruction; who instead of employing Government officials, procured the details in general from private persons, and these were afterwards corrected by suitable checks. The gross population, for example, not only in the whole country, but in sections such as counties, dioceses, and parishes, harmonised with what might have been expected from adding the natural increase to the numbers for 1831; and whenever an opportunity occurred of comparing the results with those which had been reached by other means, the discrepancy was very small.*

That census, however, had nothing to do with *religious worship.* It classified the population according to the creed which each person professed; and thus it reached directly a result which we seek to reach indirectly from the ecclesiastical census of 1851. That of 1851, on the contrary, reached directly a result which could only be derived from the first census by estimate and calculation; but both are important, and we cannot well dispense with either aspect of the whole question.

Several years ago, I made some important analyses of a portion of the Irish census; and from the paper on the subject, published in 1859, the following extract is taken.

"Previous to the publication of this Census, there was no reliable information respecting the relative strength of religious parties; and as soon as it saw the light, an outcry was raised by each of the four divisions of the community, impugning its accuracy. The members of the Established Church declared that they were numerically much stronger than they were represented to be; the Roman Catholics did not hesitate to attribute to the enumerators intentional inaccuracy; the Presbyterians asserted that their relative importance was not sufficiently recognised; and the other Protestant Dissenters (many of whom were not *exclusively* so, but nominal

* First and Second Reports of the Commissioners of Public Instruction, Ireland, presented to Parliament, 1835.

"Churchmen or Presbyterians still,) complained that they were entirely "ignored. To impartial judges, this concurrence of dissatisfaction is strong "evidence of the general correctness of the Census. Many previous "statements, made without authority and occasionally in defiance of it, "were here contradicted; and men are slow to perceive their own errors— "slower still to acknowledge them."*

In 1851, a "Census of Religious Worship" was compiled for each of the two sections of Great Britain. That for Scotland was published separately, and at a comparatively early period after the receipt of the detailed information. It had been anxiously looked for: and was therefore issued with somewhat less care than was bestowed on the publication for South Britain.† The Census of Religious Worship for England and Wales naturally attracted much attention; and very different conclusions were drawn from it by different sections of the community. It is to this publication that I now purpose to allude exclusively.

II.—Modes of Ascertaining the Religious Elements of the Population.

The Census just alluded to is in some respects the end aimed at; but in other respects it is only means to an end. It affords us a clue by which other facts of importance may be arrived at; and one of the most interesting of these is the analysis of the population into its constituent elements, on the ground of creed. We cannot ascertain all that we wish to know, or all that is perhaps desirable to be known; but a great deal of information lies on the surface, and much more may be reached by legitimate inference from the data placed before us in the tables.

1. *Estimate from Places of Worship.*

Before 1851, we possessed only rude approximations to the relative numbers of religious bodies; and one of the facts from which people most

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* *Ulster Journal of Archæology*, for April, 1859.

The general result was the following:—

	Persons.		Per Centum.
Members of the Established Church	853,160	or	10·726
Roman Catholics	6,436,060	"	80·215
Presbyterians	643,058	"	8·840
Other Protestant Dissenters	21,882	"	·275
	7,954,160	"	100

During twenty-six years, the absolute numbers have diminished, and the relative proportions have greatly altered. But in the absence of official information, it would be unsafe to guess to what extent.

† See Appendix A.

commonly reasoned, was the number of religious edifices supported respectively, by the Established Church and by Non-established Churches. Now, in 1851, there were the following—

Places of worship in connection with the Established Church			14,077
Do.	do.	all other bodies...	20,390

If we had only this fact from which to judge, it would appear that the members of the Established Church are only as 7 to 10, when compared with all other religious communities; but this conclusion is modified when we come to consider the capacity of the buildings, or the accommodation for worshippers which they severally afford. Thus,—

	Number.	Sittings.	Average.
Churches	14,077	5,317,915	377
Chapels	20,390	4,894,648	240

Hence, it appears that the 20,390 chapels are equivalent to only 12,983 churches; assuming for the moment, that in all other respects they are alike.

But a further modification is necessary. Of the churches, 13,854 are separate buildings, and only 223 (1½ per cent.) buildings of a different class; so that with few exceptions, they possess permanence of character, being devoted to ecclesiastical objects for ever. Of the chapels, on the contrary, there are 3285 (16 per cent.) not separate buildings; and if we reduce the numbers already attained, for this second reason, we have the following:—

	Actual Churches.	Equivalent Churches.	
	14,077	12,983	
Deduct.....	223	2,079	(16 per cent.)
	13,854	10,904	

This still assumes, that in all remaining respects the two classes of buildings are equal. But what if the one be permanently, and exclusively, and systematically devoted to religious objects, while many of the others are only temporarily or occasionally so, or in alternation with other uses. This is actually the case. In 1851 the benefices* in England and Wales were nearly 12,000 in number, each of which had its Incumbent, with clerical and lay assistance, in almost all the larger and more populous

* In 1858 there were 12,092 benefices in England and Wales; but a benefice often contains two or three consecrated churches, independent of incipient congregations in school-rooms and other buildings.

parishes and districts. But, for the 20,390 chapels belonging to other communions, we find in the census returns only 8696* professional dissenting ministers. This is between a third and a half as compared with the number of chapels; and it is therefore quite clear that many of the latter must be only preaching stations, served by pious and worthy laymen, who are engaged in secular occupations during the week. Not only pastoral and missionary duties, therefore, are out of the question; even efficient congregational superintendence is morally impossible.

The extent to which mere preaching stations are multiplied, as compared with *bonâ fide* chapels, may be learned from the evidence of Mr. Edward Baines before a select† Committee of the House of Commons. His returns shew that of 19,481 places of worship, belonging exclusively to "the three "denominations,"‡ so many as 7,473 (39 per cent.) are mere temporary preaching stations. This last fact may be illustrated by a reference to the town of Liverpool. In 1851, there were 99 chapels returned in the census, as within the borough, not connected with either the Established Church or the Roman Catholic body;—yet from the Directory for the same year, not more than 60 appear to have had definite ministers connected with them.

It is unnecessary to pursue the subject farther. These facts are sufficient to show that any estimate of the relative numbers of members, founded on a direct relation to the number of religious edifices, is fallacious in the highest degree. The same may be said of the Irish census of 1834, which showed a totally different per-centage§ of members and of places of

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* This includes both Protestants and Roman Catholics. As the statement has been called in question, I give the complete analysis from the Second Part of the Census for 1851. The figures may be found in vol. i. of "Ages, Civil Condition, Occupations, &c." pp. ccxviii, ccxix, ccxxii.

Clergymen and Ministers in Gt. Britain and the Islands of the British Seas, 30,047	England and Wales.. 26,016	Clergymen	17,320	8,696
		Protestant Ministers	6,405	
		Priests and other Religious Teachers..	2,291	
	Scotland 3,812			
	Islands in Brit. Seas.. 219			

† On Church Rates, 1851, p. 435.

‡ Independents, Baptists and Methodists.

§

	Members.	Places of Worship.
Established Church	10·726	34
Roman Catholics	80·215	47
Presbyterians	8·840	10
Other Protestant Dissenters....	·275	2

It is obvious that nearly all the Chapels of the last class were merely preaching stations.

worship.* The Presbyterian body was the only one in which the two sets of figures approximated; and the fact is explained by their local concentration. So many as 57 per cent. of all the Presbyterians of Ireland, and 41 per cent. of their places of worship, were then situated in the two counties adjacent to Scotland, viz., Down and Antrim.

2. *Rate of Increase.*

In the returns for 1851, the existing churches and chapels which had been erected previous to 1801 were separated from others of subsequent erection; and the number added during each decennial period for half a century was easily recorded. [The table of churches alone will be found in the Report, page xl.; and that for the churches and chapels jointly at page cxxxi.]

Looking only at the facts which such a table records, and assuming the circumstances of the two sets of buildings to be identical, it would follow that the increase of Protestant Dissenting chapels, during the present century, has been much more rapid than that of churches.

But here, as before, a modifying fact has to be borne in mind. It is well known, for example, that a church is a permanent erection, for the people of a fixed locality, whoever they may be. It thus bears a relation to a certain limited space, whether that be densely or sparsely inhabited, or whether by rich or by poor. A chapel, on the other hand, is related to the congregation; and changes its site† as the members change their residences. Liverpool again furnishes a ready illustration. I have shown elsewhere,‡ that 9 dissenting chapels have occupied 26 different sites; gradually receding from the lower parts of the town towards the residences of the more wealthy in the outskirts. Thus, the congregation which established

* See also Analysis of the Scottish Census. Appendix A.

† "When the middle classes and well-to-do people who have been in the habit of attending the chapel, go away into the country, as to some suburban residence, it follows almost as a matter of course that the seat-rents fail, and another chapel is erected in a suburban district, and the congregation is transferred, and the chapel ceases to be occupied as it was formerly."—*Rev. George Osborne, (Wesleyan Minister,) Lords' Report on Church Rates, Question* 1775. "The necessarily self-supporting character of all the institutions founded by Dissenters renders it, in their case, almost indispensable to make the erection of a chapel dependent on the prospect of an adequate pecuniary return. Hence, though the Congregational and Baptist bodies have established recently their 'Chapel Building Societies,' the operation of these central boards is practically limited, if not by an actual local demand, yet by the prospect of a speedy local sympathy among the middle classes."—*Mann,—Census Report*, page cxxx, n.

‡ Condition of Liverpool Religious and Social, p. 13.

itself in Key Street in 1707, removed to Paradise Street, more than half a mile distant by the nearest route, in 1791; and again in 1849, it removed to Hope Street, three quarters of a mile farther; without adding a single sitting to the accommodation in 142 years. Now, if we subtract the first dates of these nine chapels from the last dates, we have an aggregate of 584 years, or an average of 65; that is to say, they are all represented in the census returns as founded 65 years later than the date at which their respective congregations were formed. Six of them were erected previous to 1801, and three had taken up a second position before that date; yet five of them are represented as having been built or appropriated, at an average of only twenty years before the census!

Let us suppose, what is not very far from the truth, that *every* chapel which was erected in Liverpool previous to 1801 will be sold and replaced previous to 1861; it would then appear from the principle adopted in the census report, (1) that there were *no* Protestant Dissenters in the town before the present century, and (2) that the large majority of their congregations had been created within the last thirty years. This is a *reductio ad absurdum*, and shows how valueless are the arguments founded on the mere dates of erection.*

A similar illustration is found in Nottingham. "From Mr. Wylie's "local history, it would appear that of the 29 meeting-houses returned to "the census office, only six dated back to the commencement of the "present century. In other words, dissent in Nottingham, on Mr. Mann's "hypothesis, all but quintupled itself during the 50 years. In point of "fact, however, there were not six, but thirteen or fourteen dissenting

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* It is only just to Mr. Mann to state that he was thoroughly aware of the objections urged here, and that he gave the principle merely for what it was worth, or by way of a first approximation. He says, "for several reasons, the conclusions to be drawn from this source, must be subject to a certain degree of hazard. In the first place, as the facts relate entirely to *existing* buildings, there is no account of those which may have been in existence in former times and since abandoned. In the second place, in consequence of an oversight in the framing of the question, several places (parts of buildings) *erected* in former years, but only latterly employed for religious services, have been returned with the earlier date. And thirdly, with respect to as many as 4,546 (out of the 34,467,) no date whatever is inserted in the returns."—*Report*, page cxxxi. This is speaking with great caution: and if these facts had been borne in mind, the writer would have been spared some of the censure which he has received. It is unfortunate, however, that others accept the principle without modification, and as a *last* approximate result.—See "*The Truth about Church Extension; an Exposure of Fallacies and Misstatements contained in the Census Reports.*"—*London, Skeffington*, 1857.

"congregations in 1801, and probably several more 'whose memorial has "'perished with them.'"*

Since 1851, however, when the census was taken, and since the close of 1853 when it was published, a very valuable document has been printed; viz., a Parliamentary return obtained by Mr. Bright in 1855, showing the number of places of worship licensed under the Toleration Act. It brings us a step nearer the truth; and demonstrates that though the efforts of Protestant Dissenters have been very great, and their pecuniary sacrifices large, their numbers were not so small in 1800 and 1801, nor has their progress been so rapid since that time, as Mr. Mann's arrangement of figures would suggest. From a comparison of the number of places licensed, with the number of existing buildings returned to Mr. Mann as opened in each decennial† period, the following table has been compiled‡:—

Ten years ending	Places licensed.	Still in existence.	
1810	5,460	1,169	or 21 per cent.
1820	10,161	1,905	or 18 „
1830	10,585	2,865	or 27 „
1840	7,422	4,199	or 56 „
1850	5,810	4,397	or 75 „
	39,438	14,535	

Thus, while the erection of chapels has been rapid, the desertion of the less desirable ones has been rapid also. With the additional light which the last named document has thrown on the subject, an elaborate analysis has been made of the actual increase since the commencement of the present century; but it is sufficient for my purpose to show the fallacy which is inseparable from such a partial statement of facts.

3. *Education.*

The question of Schools is similar to that of Churches and Chapels; and is collateral with it. It appears from the Census of Education for England and Wales, that 83 per cent. of the daily schools of the country are supported by the Established Church, and only 17 per cent. by all others; but we may not infer from this that the Church possesses more than four-fifths of the community and all other communions less than

* The Truth about Church Extension, p. 16.

† In the two documents the decennial periods do not quite tally, the Census reckoning 1801-'11-'21, &c., and the Return 1800-'10-'20, &c. But as they are for equal periods coinciding in the main, the result would not be materially affected.

‡ The Truth about Church Extension, p. 19.

one-fifth. In the matter of Sunday Schools, the case is altered; for only 44 per cent., or less than the half, belong to the Church, and 56 per cent. to all others.* The explanation of these facts is, that the Church, being more permanent and systematic, considers a set of daily schools as a necessary adjunct to the ecclesiastical arrangements; whereas, those whose very congregations are temporary rarely think of daily schools at all, but give their strength to Sunday schools.

A descent from the vague comparison of churches and chapels to the more accurate yet still imperfect one of the sittings contained in them, suggests a somewhat similar transition from schools to scholars. Here, however, the difference is not very great. The Established Church educates 78 per cent. of the children on week days; but, though there is a slight increase in the number taught on Sundays, she educates only 38 per cent. of the whole.† The explanation is, that other religious bodies receive an accession of nearly a million and a quarter of Sunday school pupils who are not at the school during the week. Many of these are taught not in school-rooms but in chapels;‡ and thus the proportions are altered. Hence, it is impossible to arrive at a correct estimate of the relative strength of religious bodies, from an examination of schools and education alone.

4. *Marriages.*

The inference from the returns of the Registrar General on Marriages, is equally deceptive, when taken by itself. It appears that at present nearly five out of six, or more accurately 82 per cent. are performed in the Established Churches of the land, while 18 per cent. are performed elsewhere; but it cannot follow that five§ persons in every six are members of the

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* Report of Census of Education, p. liii. † Ib., p. lxxvii.

‡ Of the Church of England Sunday Schools, 1,811 or 18 per cent. are held in places of worship; and of Dissenters' Sunday Schools, 7,731 or 62 per cent. Report, p. lxxix.

§ The following is an Analysis of the marriages performed during seventeen years, (1841-57 inclusive) shewing both the actual numbers and the per centages. It is taken from the "Twentieth Annual Report of the Registrar General," p. iii.:—

				Per Cent.
Total Marriages, 2,463,279	Established Church		2,143,964	=87.04
	Otherwise, 319,313 (12.96 ℘ ct.)	Roman Catholics	84,766	= 3.44
		Protestant Dissenters	136,236	= 5.53
		Quakers	1,022	= .04
		Jews	3,794	= .16
		Registrar's Office	93,495	= 3.79

National Church. Several reasons could be assigned for the preference which is given to the Church in such matters, even by persons not of its communion, though every difficulty which had formerly existed, disappeared on the 1st of January, 1857. The Registrar-General remarks, "no one has "now any just ground of complaint;. and the 131,031 marriages in the "National Church [1857] were performed by no unwilling conformists to "her rites."*

5. *Number of Sittings.*

This subject has been noticed incidentally in treating of Places of Worship; but it may be directly referred to, and placed in a new light in a few words. Suppose that there are 1000 sittings in one or more places of worship, and that the following very common facts exist at the same time. (1.) The congregation has been divided once, perhaps twice, so that not more than one-third of the sittings can ever be occupied at the same time; (2) there is no stated minister, nor is there moral certainty that a regular minister will officiate on any given Sunday; and (3) the chapel or chapels cannot be opened to the poor, (being private property,) and they are more or less out of repair. It is clear that the 1000 sittings would not be worth 100 in such circumstances, if the latter be available, comfortable, and connected with regular and suitable worship, as well as with pastoral duty. One sometimes finds the nominal accommodation exceeded by the actual attendance,—as when 1300 worshippers are collected in a building intended for 1200,—but this is a rare and exceptional case.

6. *Number of Ministers.*

The circumstances of the various religious denominations are widely different; and each in turn exhibits a deficiency and a redundancy. For example, the Established Church in the West of Ireland, the Roman Catholic Church in the Eastern and Midland shires of England, the Protestant Episcopal Church of Scotland, and the Free Kirk in certain districts of the Highlands, must all maintain ministers at points where each is represented by only a few families. In the crowded towns, on the other hand, the supply is wholly inadequate; one minister having thousands assigned to him when he could only do justice to as many hundreds. Again, the clergy of the Established Church have a larger number of duties to perform,—during the week as well as on Sunday, in the house as

* Twentieth Annual Report, p. iv.

well as in the Church, and to the inhabitants of a fixed area as well as to a mere congregation,—and therefore in all the larger cures the presence of two ministers is indispensable. Hence it appears that while one Church addresses herself to all the people, while another stretches her ministers over the land for little more than half a million of souls, and while others again recognise few beyond the limits of their congregations, no safe inference can be drawn respecting the number of adherents from the number of ministers of religion.

III.—Mr. Mann's Mode of Calculating.

While the modes of calculation just noticed have been adopted by interested persons throughout the country,—each selecting that phase of the question which seemed most favourable to himself,—he whose authority is so frequently quoted and whose name is so well known, has adopted a totally different plan. It is one in accordance with the peculiar inquiry which he was authorised to make, for it has direct reference to "religious worship." Accordingly, no attempt is made to analyse *all* the people, as in Ireland; some of whom, having had no creed for ages, would have been obliged to discover their parental* or ancestral leanings. Nor is any notice taken of the different meaning which two sets of Christians attach to the word "member;" some Churches meaning by it a person baptized in connexion with one of them, and who has taken no opposing step afterwards, and others again understanding by it, one who is an adult, and a voluntary communicant. Mr. Mann's attempt is merely to reach the number of those who are actually church-going or chapel-going; and to apportion them among the leading religious communities. In stating his views, I shall only venture to alter slightly one term, and that for the sake of greater explicitness.

In the Census Tables, the number of Attend*ants* is given,† in connexion with each of the religious bodies in the country, for Morning, Afternoon,

* Previous to 1850, I analysed a population of nearly 24,000 by a house-to-house visitation, and numerous personal inquiries from the people themselves. "In many cases, it was so long since families had been conventionally classed with any body of Christians that they actually did not know what to call themselves. Their parents had been no better; 'they went just nowhere Sir,' or to 'no place in particular,' or to 'any place [Church or Chapel] convenient.' In ascending to the four grandfathers and four grandmothers (when they knew them,) of husband and wife, one at least was generally found who had acknowledged a connexion with some class of Christians."—*Missions at Home, or a Clergyman's Account of a Portion of the Town of Liverpool*, 1850.

† Census, Table A and Supplement I.

and Evening services respectively. In a subsequent statement, the Attend*ances* are given,* put in at all the churches and at each set of chapels. It is obvious that the majority of persons attended only *once* on the Sunday on which the census was taken, but many attended *twice*, and a few *three times*. The sum of the attend*ants*, therefore, gives us the attend*ances*. The following table which does not appear in the Census Volume, is condensed from it by Mr. Mann himself† :—

	ATTENDANTS.			Attendances.
	MORNING.	AFTERNOON.	EVENING.	
Church of England.....	2,541,244	1,890,764	860,543	5,292,551
Independents	524,612	232,285	457,162	1,214,059
Baptists	360,806	224,268	345,116	930,190
Wesleyan‡ Methodists....	707,921	645,895	1,053,537	2,417,353
Roman Catholics.....	252,783	53,967	76,880	383,630
All Others.....	260,116	136,956	261,211	658,283
	4,647,482	3,184,135	3,064,449	10,896,066

It follows from this, that if each person had attended service only once during the Sunday nearly eleven millions would have been present at church or chapel; that is to say, about 61 per cent. of the entire community.§ This however was not the case; the "individual persons," as Mr. Mann calls them, were not nearly so numerous. Suppose we call them, for the sake of distinction, Attend*ers*, the question arises how many in number were they? It is important to answer this distinctly; as the number so found is a step by which we reach that of the entire worshipping community.

1. *Attenders, or separate Worshippers on one Sunday.*

In the Census Report (page cliii and note) Mr. Mann points out four

* Supplement II to Table A.

† Journal of the Statistical Society, vol. xviii., p. 151.

‡ This does not include Calvinistic Methodists, who are included under "All others."

§ It is estimated that 70 per cent. is a fair proportion of the people who are able to worship at *some period* of the day.

modes* of arriving at the number of "individual persons" present at any church or chapel on the 30th of March, 1851. They are not very different in their results, but he gives a decided preference to the one mentioned in the text, and which follows here. The following quotation is from a paper to be described hereafter:—

"The plan adopted in the Census Report was as follows:—First, the "numbers attending *morning* service were taken as a basis, since it was "clear that they were all separate individuals who could not yet have at-"tended twice; then it was asked how many of the *afternoon* attendants "were not present anywhere at the morning service, and ought therefore to "be added as fresh worshippers? and it was supposed that *a half* of them "were thus additional. Finally, a similar question was put concerning the "*evening* attendants, and it was supposed that *a third* of them had not "attended anywhere, at *either* of the previous services, and ought therefore "to be considered as a further addition of new worshippers."

This is so clearly stated, that it is only necessary to give one or two illustrations, and then to give the result in tabular form. Referring to the former table of Attend*ants*, neglecting altogether the Attend*ances*, with which we have nothing to do, and following the formula just quoted we discover the following number of Attend*ers*.

	Morn.	After.	Even.	
Church of England...	$2,541,244 + \frac{1,890,764}{2} + \frac{860,543}{3}$			$= 3,773,474$
Roman Catholics.....	$252,783 + \frac{53,967}{2} + \frac{76,880}{3}$			$= 305,393$

Proceeding in the same manner with the others, and preserving the six classes already given, we have the following:

	Attend*ers* or "Individual Persons."
Church of England.....	3,773,474
Independents	793,142
Baptists	587,978
Wesleyan Methodists	1,385,372
Roman Catholics.....	305,393
All others	415,664
	7,261,023†

* The plans are the following:—

	RESULTS.
(1) Morning + ½ Afternoon + ⅓ Evening, = ...	7,261,032
(2) The minimum limit is 4,647,482 for all these attended in the morning: and the maximum one is 10,896,066, for there were no more attendances put in. The mean of these is	7,771,774
(3) For the attend*ers* take two-thirds of the attend*ances*.....	7,264,044
(4) To the number at the best attended service add one-third..	8,476 693

This last is subject to an important deduction; for, so many as 9,915 places of worship had only one service.

† This amounts to only 40½ of the gross population instead of 70 per cent.

We may here pause, before taking the next step, and consider the objections which have been made to the principle of this calculation. They are not numerous, nor have they been forcibly put forward; indeed the general coincidence of the result in this case, with that which would follow from each of the other plans, is a convincing proof of its fairness and general accuracy.

Obj. (1.) After all, this is only an *estimate;* why then is it placed side by side with ascertained facts, like the numbers in the Census Tables?—*Ans.* We are in search of *more* accurate details, instead of *less* accurate details; we seek *more* reliable information instead of *less* reliable; and a *close* approximation to the truth instead of a *wide* approximation. The accuracy is a question of degree, since absolute perfection is unattainable. It may often suffice to say in general terms, that the circumference of a circle is three times the length of its diameter; but it would not suit to accept this as the basis of mathematical reasoning, or of calculations in science or the arts. In like manner, each of the modes of calculation already examined possesses advantages. It serves as a hint to those who require only a general idea, and *properly understood* it is corroborative and corrective. Besides, the "Census of Religious Worship" is itself only an approximation, very few of those who sent in returns having carefully reckoned those present at any particular service. Certain defects are admitted on almost every page of the Tables, and an attempt is made to remedy them by "estimates," that is by averages. Yet after all, we know that in many instances we are still wide of the truth. If, therefore, we are to reject all estimates, the book is of no practical value whatever; but if we are to eliminate all known causes of error in order to see the truth more clearly, the plan adopted possesses many recommendations.

Obj. (2). Mr. Mann says "it will be evident that this computation "mainly rests upon conjecture; and any one, of course, is at liberty to make "a different conjecture, and to assume that the number of new worshippers "at the afternoon and evening services, is likely to have been more or less "than a half and a third respectively, and also that the proportion may have "varied, (as no doubt to some extent it did), in various religious bodies." Here then is an acknowledgment of incorrectness; and no doubt other persons will make conjectures differing from this one.—*Ans.* Mr. Mann also says, after the Census Report had been before the public a year and a half, "while anxious to allow the possibility of error, I have yet suffi-"cient confidence in the probable correctness of the estimate to venture to "reproduce the principal results." Besides, there is not an acknowledgment of *incorrectness* but of *imperfection*, such as one sees in a vanishing fraction or a circulating decimal.

Obj. (3.) The morning attendance should not be taken as a basis; for among the Methodists both Wesleyan and Calvinistic, the evening attendance is larger than either of the others.—*Ans.* Some one service must be taken as the basis, and in all England and Wales the attendance is decidedly largest in the morning. Besides, in rural families, this is not

only the best attended service, but often the only one, while even where there is an afternoon or evening service, it possesses more or less of the character of an extra one. The morning service may be said to be the service of *necessity*, the afternoon service that of *convenience*, and the evening one that of *devotion*. Further, it is well-known that many who attend the service of the Established Church in the morning, consider themselves so far freed in action, that they attend at a Methodist chapel in the evening. But even when such a change is not made, a corresponding fact occurs;—in the poorer portions of large towns the evening congregation in the Established Churches, is generally much in excess of the morning congregation.

2. *Entire Worshipping Community.*

One step only of the process is wanting: it is to find the relation existing between the attenders on any one Sunday, and the entire worshipping community who get their turn of church or chapel. It is self-evident that only a portion of the pious and worthy people in the whole country, or of those who are actual worshippers, can be present at public worship on any one Sunday. Those who are absent include the young, the aged, the sick, persons in attendance upon these, persons engaged in lawful occupations or in "works of necessity and mercy," travellers, those in charge of houses, and many others employed in the discharge of domestic duties, or in traffic which the law does not suppress. It is calculated in the Census Report that not more than fifty-eight sittings are required at any one time for every hundred of the population; but it is not meant that the remaining forty-two persons are necessarily home-heathen. On the contrary, many of them show their religious feeling in the same way as others do, but not on the same day. An allowance must therefore be made for those who are *bonâ fide* worshippers, but who were absent on the Census Sunday, as a similar number would be absent on any other Sunday. The question simply is,—what allowance?

This part of the calculation was given by Mr. Mann in a paper read before the Statistical Society of London, 18th December, 1854, and published in the Journal of the Society in June, 1855. He estimates that from the operation of all the causes specified, and perhaps of others not noticed, there are in the Church of England and the Roman Catholic Church, as many worshippers absent as present on any given Sunday. In other words, that of the entire worshipping community in these two Churches respectively, fifty per cent. are present at some one or more of

the services, and the remaining fifty per cent. at other convenient times. Hence, when we know the number of attend*ers*, or "individual persons" present on one Sunday, we require only to *double* it, to get at the entire worshipping community. Among Protestant Dissenters the attendance is somewhat better than this. Such reasons as the following may be assigned for the fact:—(1), that they embrace fewer of the outcast and pauper poor; (2), that with them mere preaching is more of a necessity, and (3), that there is a greater definiteness and positiveness of opinion among those who voluntarily depart from what is usual. Mr. Mann estimates, therefore, that of every hundred chapel-going Dissenters, so many as sixty are present at some service of any given Sunday; so that by *adding two-thirds* to the attend*ers* we reach the entire worshipping community.

Proceeding on these principles, we obtain for England and Wales* the following numbers, which are easily expressed by per-centages at the same time:—

Established Church		7,546,948	= 42 per cent.	
Roman Catholics		610,786	= 3½	„
Protestant Dissenters and others.				
Independents	1,321,904	= 7.35		
Baptists	979,964	= 5.45		
Wesleyan Methodists	2,308,954	=12 84		
All others	692,788	= 3.85		
		5,303,609	= 29½	„
		13,461,343	= 75	„
Balance, Non-worshipping		4,466,266	= 25	„
		17,927,609	100	

Thus, though the nation is a Christian nation in several senses of the term, so many as one-fourth of the people do not worship in the church or chapel of any religious community. Nearly all of them have a nominal connection with some creed and form of worship, and they are not necessarily irreligious as we shall see; but their religion, when it exists, is passive not active. Now, the only church which avowedly and systematically takes cognizance of these, whether they are poor or rich, and whose Ministers may be compelled to perform Ecclesiastical offices for their advantage, is the Established Church. To her, every portion of the field is transferred when it has passed out of cultivation and become a moral waste, that she may restore it again to a condition of fertility, if

* A similar Analysis for Scotland is given in Appendix A.

possible. To the forty-two per cent. of her ordinary church-going members she is *Ministerial*, and to the twenty-five Non-worshippers she is *Missionary*; so that the joint area of her operations is over sixty-seven per cent. of the population, or more than twelve millions of the seventeen.

Thus, therefore, the problem is solved, by induction from the best facts which we possess, and by a cautious and patient analysis of the gross numbers placed before us.

The objections which not only may be brought against these figures, but which actually *have* been brought, admit of easy reply. They may be considered here, before we proceed to the statement of additional facts.

Obj. (1.) After all, these results are not in the census; why lay them before the public at all?—*Ans.* The suppressed major premiss is false, which is, in effect, that no information respecting such numbers is of value, except that which is found in the official publication. Nor is the minor premiss true; for though the entire worshipping community is not found in the Census of Religious Worship, the fact from which it immediately follows is there stated briefly. The one premiss, therefore, being false in principle, and the other being partially false in fact, the conclusion which constitutes the *gravamen* of the objection is untenable.

Obj. (2.) Well, but it is only an *estimate.*—*Ans.* No; it is a calculation founded upon the best evidence in our possession. In value, it of course falls short of an enumeration of individuals on the ground of professed creed; but it excels such an enumeration, in as much as it shows something of the firmness with which certain public duties of religion are discharged by the masses of the people. And no other calculation which has been laid before the public has made allowance for a greater number of disturbing causes.

Obj. (3.) There is nothing *official* about it. This paper was read before a private society, as an individual and personal act.—*Ans.* The conclusion suggested here is the same, that therefore the calculations are of less importance than is supposed. Now (1) the separation of a man from office is happily not his separation from qualifications, and from the fruits of experience. Mr. Mann was selected by the Registrar General to perform a certain task, avowedly because he possessed unusual fitness for it; and such experience as he gained in the performance he brought to the subsequent consideration of this subject. (2.) He read his paper a year after the publication of the census, and corrected it for the press a year and a half after. (3.) It was no more individual or personal than the whole of the Census Report, which was the product of a single mind; and (4) it was not addressed *ad populum*, but was laid before that Society of the United Kingdom, whose members are specially conversant with such inquiries. It is nothing to say of such an objection that it fails to disturb the previous conclusions; in reality it serves to confirm them, by drawing attention to points of interest not hitherto noticed.

Obj. (4.) Admitting that the number of attend*ers* is correct enough, the last step contains an erroneous estimate. It is absurd to suppose that there are as many persons absent from the Church and Roman Catholic chapel as are present altogether; or that only three-fifths of Protestant Dissenters can manage to hear a sermon at any part of the Sabbath. Experience shows that a larger proportion are present, and a smaller proportion absent.—*Ans.* 1. Experience shows this only in *select portions of society*, as among the intelligent and virtuous. In certain pious families, consisting of healthy adults, it is possible that every member may be able to attend on some portion of every Sunday, but in the great majority, this is not possible; and in families which are not pious and only partially intelligent, even the desire does not exist. 2. But apart from the partial view which is taken in this objection, the theory when carried out demonstrates its own incorrectness. Thus, let us suppose that of Churchmen and Roman Catholics, who are actual worshippers, not 50 but 60 per cent. are present on any given Sunday at some time of the day: it is evident that to get at the whole number we must add two-thirds to the attend*ers*. Also, if so many as 75 per cent. of Protestant Dissenters are present, we add one-third. Our table would then stand as follows:—

	Attenders.	Worshipping Community.	Per Centage.
Churchmen	3,773,474	6,289,124	35
Roman Catholics	305,393	508,989	3
Protestant Dissenters and others	3,182,165	4,242,887	23½
		11,041,000	61½
Balance, Non-worshipping		6,886,609	38½
		17,927,609	100

This would show nearly two-fifths of the population to be non-worshipping,—a proportion which is wholly absurd; though we may reach at no very distant date, that condition of irreligion. The objection was brought originally, to show that the members of the Established Church are not so numerous as Mr. Mann supposed them to be, but it proves the contrary. For, instead of 67 per cent. of the gross population, she would be responsible in these circumstances for 73½ (=35 + 38½) or nearly three-fourths of the whole. 3. We can reply from ascertained facts. In my own parish a roll of attendance has been marked weekly for upwards of two years and a half, so that in one instance at least, the means of comparison are within our reach. The people are poor, and were recently almost all non-worshipping, so that the congregation has been won from the desert during about nine years. The families of positive church-going people, all of whom have attended worship more or less within the last few months, comprise 3104 persons. Yet the average number of attend*ers* or "individual persons," who have been present weekly is 816, or 26¼ per cent. So that in this case—an exceptional one, it is true, but with an average extending over a whole year—we should require to multiply almost by four, to get at the worshipping community.

Obj. (5.) These new figures have only recently been brought to light, and

are only now submitted to the "test" of public opinion. *Ans.* 1. They were *published* in June, 1855, and are well known to the Members of Learned Societies in Europe and America. 2. The "Census of Religious "Worship" does not contain, and could scarcely with propriety contain, an investigation respecting the positive "adherents" of each religious community. This is such an investigation; and the only one which comes to us formally and with authority. No comparison can be instituted between the work which contains the materials only and that which exhibits the results.

IV.—General Considerations.

1. *Operation of the Principles.*

From the principles of the foregoing calculations, it is apparent that if there were a number of families, or congregations, or a whole community which attended *more* regularly and frequently than is customary, the number of separate attend*ers* would appear from the figures greater than the reality; and the number representing the whole worshipping community would be still farther exaggerated beyond the truth. On the other hand, if there were a community *less* frequent in their attendance at public worship than is usual in all England and Wales (as in the example quoted above), the worshipping community would appear by these calculations, smaller than it is in point of fact.

From all this, such deductions as the following are almost self-evident.

(1.) In this principle of calculation, numbers and frequency of attendance act and react on each other. Greater frequency gives greater apparent numbers, and less frequency smaller apparent numbers.

(2.) In rich and comfortable communities (e.g., Bath, Cheltenham, Oxford) where conveniences for public worship and even luxuries abound, the number of irreligious will in general appear smaller than it actually is, and may wholly disappear.

(3.) In a poor and ignorant community, where the necessaries of life are procured with difficulty, and where clothing may often be insufficient and money scarce (e.g., Southwark, Lambeth) attendance at worship is less frequent; and the number of irreligious therefore appears greater than it is in point of fact.

(4.) In towns of limited population (e.g., Exeter, Cambridge), the improved attendance is a reality; for the number of ministers of religion is so great that only a manageable population is committed to each. In

towns of rapid growth (e.g., Swansea and those in Lancashire), the average of population for each clergyman is much too large, and the irreligion of the masses is a painful reality.

(5.) It is only over a broad area, therefore, that the figures already found are an accurate expression of truth; and such an area is the whole of England and Wales. The more numerous and varied the facts, the more accurate is the average. This is a principle well known and universally admitted. A local tendency in one direction is counteracted by a similar tendency in another; and thus the balance is adjusted by the very variety of interests which men own, and of circumstances in which they are cast. Those who attend more frequently than the assumed average, form a set off against those who attend less frequently; and as intelligence and piety are not confined to any grade of society, we may suppose them to exist in nearly equal numbers. In like manner, the rich and the poor are correlated, the rural and the town population, the maritime and inland, the manufacturing and the commercial, dense and sparse communities.

6. For smaller areas, the principle is still of great value. Though not perfect in such cases, it is vastly superior to most others; and gives us an approximation to truth, such as observation and experience frequently verify.

2. *Calculations for smaller Areas.*

In the census which we are considering, the details have been given for (1) the eleven Registration Divisions, (2) the forty-four Counties,* (3) seventy-three† large Towns and Boroughs, and (4) the Registration Districts or Poor-Law Unions, 623 in number. The first and last of these divisions are little known to the general public, and are not marked upon ordinary maps. But the second and third are well known;—the Counties both in respect to their area and their population, and the Towns in respect to their sites, their population, and their importance.

Though well aware that Mr. Mann's formulæ would be less applicable to small areas than to the whole of England and Wales, I felt that it was still of great importance to obtain an analysis of portions of the population. The result given here, is unquestionably a *good* approximation; and if not

* North and South Wales are each given as one, and Yorkshire is divided into the East, North, and West Ridings.

† These are mainly Municipal or Parliamentary Boroughs, of which London includes several. The Metropolis, or London in general, is also given.

the best that could be desired it is the best that can be had in the present state of our knowledge.* The calculations were made for the 44 County Districts, and also for the 73 great Towns; and it was easy then to construct Maps, showing the four great divisions of the population in percentages. One of these,† that relating to the Towns, has been printed with the Report of the Select Committee of the Lords on Church Rates, though it was constructed for a different purpose‡; and by a slight variety of form, I am enabled to show, with the present paper, the condition of the county districts also.

The detailed mode of arriving at the results, is of course identical with that already shown for England and Wales; but it may be interesting to give a single example of the analysis of a County and of a Town, before stating the general results.

COUNTY OF OXFORD.

Population 170,439.

"*Individual Persons.*"

Churchmen	30,157	+	⅓ (30,438)	+	⅓ (8,096)	=	48,075
Roman Catholics	928	+	⅓ (109)	+	⅓ (344)	=	1,097
Protestant Dissenters, &c.	12,033	+	⅓ (10,019)	+	⅓ (17,379)	=	22,835

Worshipping Community.

Churchmen	2 × 48,075	= 96,150	or 56½	per cent.
Roman Catholics	2 × 1,097	= 2,194	or 1	,,
Protestant Dissenters, &c.	1⅔ × 22,835	= 38,059	or 22½	,,
		136,403	or 80	,,
Balance, Non-Worshipping		34,036	or 20	,,
		170,439	100	

* It has been said that I attributed far too much importance not only to the analysis of Towns, but also to that of England and Wales; the statement is, however, quite incorrect. A note was appended to the proof-sheet of my evidence given before the select committee mentioned in the text; but as it had not been spoken in evidence it was not printed. This note is given at large, Appendix B; and it disproves, incidentally, another statement, viz. that I did not refer to the "Journal of the Statistical Society."

† That Map also exhibits the absolute and relative strength of the principal sects of Nonconformists; but the numbers there are less correct than those given on page 16. This part was added hastily to the map, in London, at a distance from my papers; and the Dissenters of a miscellaneous kind were made to appear somewhat more numerous than they are, at the expense of the three principal and special communities. A further correction is that Newport should be in Monmouthshire, not in the Isle of Wight.

‡ In illustration of the Report of a select Committee of the Lords, on "The Means of Divine Worship in Populous Places," printed 5th July, 1858. I had given evidence before the Committee on the 14th of May.

CAMBRIDGE—(*Municipal Borough.*)
Population 27,815.

"*Individual Persons.*"

Churchmen	5,616 + ½ (1,436) + ⅓ (4,246)	=7,749	
Roman Catholics	260 + ½ (200) + ⅓ (180)	= 420	
Protestant Dissenters, &c.	2,722 + ½ (1,862) + ⅓ (2,735)	=4,565	

Worshipping Community.

Churchmen	2 × 7,749	=15,498 or	56 per cent.
Roman Catholics	2 × 420	= 840 or	3 ,,
Protestant Dissenters, &c.	1⅔ × 4,565	= 7.609 or	28 ,,
		23,947 or	87 ,,
Balance, Non-Worshipping.....		3,868 or	13 ,,
		27,815	100

The results in general, are not very different from what we might have predicted. In the old English counties, and especially in those which have been least influenced by either commerce, mining or manufactures, the actual worshippers at the Churches exceed 50 per cent. of the gross population. This remark applies to Hereford and Shropshire on the west, to Devonshire on the south, and to fourteen out of seventeen of the south-eastern shires. Churchmen are still numerous, but the worshipping members do not amount to quite half the population, in seven counties contiguous to these, and also in Westmoreland and the North Riding of Yorkshire. The following six are highest in the per-centage of Church attenders—Suffolk 63¾, Wilts 63, Northampton 63, Buckingham 62, Rutland and Hertford 61. The three which are lowest are Durham 21, Surrey 19, and North Wales 18.

Protestant Dissenters amount to more than half of the gross population in the two divisions of North and South Wales, and in Monmouthshire. It does not follow that they exist in these proportions in each of the twelve counties, but it is probable that they do. We have, however, no means of arriving at a closer estimate. In the East Riding of Yorkshire where Methodism is very popular, and in Cornwall where the followers of Wesley were numerous at an early period, the number of Nonconformists exceeds that of either Churchmen or Irreligious. The highest per-centages are South Wales 69, North Wales 57⅔, Monmouth 55½, Cambridge* 46, Huntingdon* 45½. The lowest are Sussex and Warwick 19, Cumberland and Hereford 16, Middlesex and Surrey 15, Westmoreland 12.

* Cambridge and Huntingdon are higher *absolutely* than Cornwall or the East Riding; but the latter are higher *relatively*. The former are places of a more religious character than the latter; and high as the Dissenting numbers are the numbers for Church-going Churchmen are still higher.

The Roman Catholic numbers are not sufficiently high to influence the colouring in any county; indeed there are twelve county districts, (one of them being North Wales,) in which they do not amount to one per cent. of the gross population. It does not appear that there was any congregation in either Rutland or Huntingdon, in 1851, though there may have been a few scattered families or individuals. In Lancashire they amount to 11 per cent; but this is the highest* limit. In no other of the 44 districts are they relatively half so numerous.

The Non-worshipping are most numerous in Surrey, Middlesex, Cumberland, and Durham; in each of which they amount to more than half the population, and in the first of which they reach 63 per cent. Northumberland, Somerset, Lancashire and Nottingham are next in order, in which the per centage ranges from 44½ to 41. It is easy to see that this is owing in a great degree to the large towns which nearly all of these counties contain. Thus, the rural portion of Surrey has its religious average dragged down by the southern portion of London, which is inhabited by a large number of the outcast and poor; Durham is influenced in a similar way by South Shields, Sunderland and Gateshead; Northumberland by Tynemouth and Newcastle; Lancashire by its numerous towns, manufacturing and commercial; and Nottingham which is a small county, by its principal town. In some of the others, the explanation is not so obvious. In a few instances, ordinary observation shows that a county possesses two sets of characteristics in different portions of it. For example, the part of Essex which adjoins Middlesex partakes of the character of the metropolitan counties, of which an illustration is found in Mr. Dickens's article entitled "Over the Border;" while the northern part is inhabited by a Church-going population, and in this respect resembles Cambridge and Suffolk. The Non-worshipping are least numerous in Cambridge and Buckingham where they amount to only one per cent.; and in Huntingdon, Northampton and Suffolk where they disappear in the calculations.

The towns are the great centres of irreligion as well as of religion, of vice as well as of virtue. Though their general character is that of a mixed population, in reality each of the larger ones is an agglomeration of distinct communities; and though there is apparently liberty of action,

* About 39½ per cent. of all the Roman Catholics of England and Wales, are found in Lancashire.

no separate "quarter" being specially devoted to any, the habits of individuals and the necessities of classes create an irresistible tendency towards the localization of people of the same kind. We have, therefore, districts which are possessed exclusively by the rich, the poor, the moral, the immoral, the intelligent, the ignorant, the pious, or the criminal and depraved. Besides, there is not only a tendency to classification, but also to assimilation; so that the few take the tone of the many, and in the majority of cases sink into the common average.

While we thus account for dense masses of Non-worshipping population in the midst of communities nominally Christian, we should bear in mind that the less frequent attendance of many of the poor at public worship appears in these results as a diminished number of attend*ers*; so that a little allowance should be made for poor communities, or for the poorer portions of mixed ones. As we are treating of this class, we may give their numbers first.

There are sixteen large towns in each of which the irreligious or Non-worshipping amount to 50 per cent. at least: while in Southwark they reach 68, in Sheffield 62, in Oldham 61½, in Lambeth 60½, and in Gateshead 60. The joint population of these is 2,622,394, and the irreligious in all this number amounts to 55 per cent. If we add to these eighteen other towns, none of which singly contains 50 per cent. of ungodly population, we have in the whole thirty-four, nearly four millions, [3,993,467.] Of these, more than two millions, [2,197,388] or 52½ per cent. are Non-worshipping. With all the modifications which have been suggested or can be assigned, this is a fact of fearful significance. On the other hand, the number is very small in Warrington, Cheltenham, Cambridge, Dover, Ipswich, and Reading; ranging from 16 per cent. in the first to 7 in the last. In Bath, Exeter and Colchester the number vanishes, probably in consequence of the better than ordinary attendance at Divine Worship, of other sections of the community.

In the Established Church, the worshipping members attain their *maximum* limit in Exeter, of 68 per cent. In explanation of this, it is only necessary to state that there are 25 Churches in the Borough, (independent of 15 chapels of other denominations,) for a population of less than 33,000. In other towns of the Kingdom, there are one, two or three churches for this number; and the wants of the population are regarded

as well supplied, if there be so many as six. The order then is Dover 65, Worcester and Bath 64, Colchester 57, Ipswich 56, Cheltenham and Maidstone 55, Reading and Wakefield 50. The eleven towns first enumerated contain in all 58 per cent. of Worshipping Churchmen, independent of course, of those who are only nominal members. But while these rise considerably above the average [42] for the whole country, there are others that sink below it; so that in fifteen towns the average is about 16. These include Sunderland, South Shields, and Gateshead, which are connected with commerce; Tower Hamlets embracing a poor and long neglected portion of London; Dudley, Stoke, Manchester, Oldham, Sheffield, Rochdale, Bradford and Preston in the manufacturing districts; Newport and Merthyr Tydvil which are also in a Dissenting District; and Carlisle which is exceptional.

The strongest point of Nonconformists is Merthyr Tydvil, where their numbers appear to rise to 83½. There is internal evidence however, that some of the returns have been grossly exaggerated; independent of the external evidence that the average for all the great towns of the Kingdom is only 21, and that in Swansea which is in the same neighbourhood and of the same character, the number of Dissenters is only 44, or little more than half as great. Besides, Swansea is the highest except Merthyr Tydvil. Colchester, Dudley, Northampton, Reading and Rochdale come next in order. The lowest numbers are found in Gateshead, Manchester, Tower Hamlets, Lambeth, Preston, Marylebone, Liverpool, Westminster, and Southwark. In these the per centage ranges from 17 to 8, and averages about 13.

The towns in which Roman Catholics attain high relative numbers are nearly all situated in Lancashire, four of the first five being Wigan 22, Liverpool 21½, Preston 18, and Manchester 14. Newport in Monmouthshire has 16. On the contrary, there are five towns in which they do not seem to be represented at all; and fifteen others in which they average only 1 in 75 of the population.

3. *Character of the Non-worshipping Population.*

Though the terms "irreligious" and "ungodly" have been used as almost synonymous with "Non-worshipping," it would be a very unjustifiable inference that none are religious but those who attend worship and hear sermons in Churches and Chapels. There are large numbers who regard

Religious Worship as a moral necessity and who look forward to it as an enjoyment; but who in consequence of limited means or improvident habits, rarely find themselves in a condition to attend, consistently with self-respect. The desire at length becomes weakened, and habits are contracted at variance with piety or attachment to any creed. In other instances, the connexion is still kept up or renewed at intervals, with the Church or Chapel, directly through the occurrence of the offices of baptism, marriage and burial, or indirectly through the school which their children attend, or through the visitor who calls at their cottages.

But, while it would be not merely unsafe but also uncharitable to regard as unchristian all who are Non-worshipping, it is undeniable that a broad line of distinction is drawn in this fact. The individual and especially the family who can spend a succession of Sundays in physical rest, or intellectual quiescence, or social intercourse, or recreation, or secular pursuits, soon finds that a species of estrangement has grown up within him to religion; and even when leisure permits or inclination prompts, he is still an absentee from Church or Chapel. Thus, he yields to his animal propensities and becomes a mere secularist, living to eat, work, and sleep; and being little under the controul of public opinion, which still exerts a salutary influence on the higher classes, many thousands know nothing of religion but the party feelings with which it is sometimes associated. Indeed public feeling frequently acts injuriously in the case of the humble man; for when few persons in a street perform "religious "worship" anywhere, or when this occurs with particular persons on few occasions, the exceptions draw forth comparisons or criticisms which few have the moral courage to bear.

There is great danger that the negative irreligion of the present generation will grow into positive and aggressive infidelity in the next;—especially in the great towns, and in those of them where the Non-worshipping at this moment outnumber the worshippers of all creeds. It is thus that the causes in the past generation are visible by their effects in this one; the seed of neglect having produced a harvest of home heathenism. Few are aware of the actual condition of portions of our great towns, for few will penetrate where facts of the following kind occur. In 1849 I had the pastoral charge of two ecclesiastical districts in Liverpool, the joint population of which was nearly 24,000. The condition of these was

carefully ascertained by visitation from house to house; and a tract was published with full details in 1850. It contains the following:—

"In six streets and their courts in one of the districts, where there is a "population of 5,939, only 29 families attend Church. In six streets and "their courts in the other district, where there is a population of 5,188, "only 14 families attend Church."

"In a population of 5,850, embracing whole streets and all the courts of "other streets (in the former district), *not one attends Church.* In a popu-"lation of 2,308, embracing whole streets, and all the courts of other "streets, (in the latter), *not one attends Church.*

"The degree of religious knowledge or religious feeling existing among "these people is low indeed. In the former district there were 467 "families, and in the latter 240, (in all a population of more than 3,000) "not one of whom would even *promise* to attend a Church Service! Yet "these are not Roman Catholics or Protestant Dissenters, they are all *the* "*lost sheep of our National Church.* There were 482 other families in "the former, and 343 in the latter, (in all a population of nearly 4,000), "who were more polite but in general less truthful; they *promised* to come "occasionally to Church. These again, are not Roman Catholics or "Protestant Dissenters, but nominal *Churchmen.* Here then is a popula-"tion of 7,000 who have never connected themselves with any party "hostile to the Church; and yet 'God is not in all their thoughts.' The "term Protestant as applied to them is a misnomer; the majority are "simply not Christians."*

V.—Suggestions for the Census of 1861.

We ought to feel duly grateful for the fact that the nation has taken a decided step in the right direction, by the publication of the "Census of "Religious Worship." Yet the importance of the subject, which compels us to welcome such *data* as it affords, demands that we should remove, as far as possible, all sources of error. With that intention, the following suggestions are offered; it being taken for granted that a "Census of "Religious Worship" will be made in 1861 also. But if that should be regarded as superfluous, a Census of adherents, like that of Ireland, 1834, would be of immense importance; as it would furnish us with a set of new facts, not hitherto arrived at.

1. The making of returns should not be a voluntary act, but should be made imperative. Several Dissenting Ministers, and a large number of the Clergy of the Established Church refused their co-operation;—in general assigning as a reason that the return was inquisitorial, or trouble-

* Missions at Home, or a Clergyman's Account of a Portion of the Town of Liverpool. London: Rivingtons, 1850.

some, or unnecessary. There was another reason which was not so frequently stated, viz., that congregations were below the average; and the ministers connected with them did not know how far the facts which they furnished might obtain publicity. In Preston, for some reason, only three out of the incumbents of ten Churches* made any return; while out of nineteen other places of worship there was only one omission. One would almost imagine that there was an intention on the part of some to destroy the value of this Census; for it is remarkable that many of those who were least interested and least earnest to promote the wishes of Government, are loudest in their complaints of the incorrectness of the volume. We are all sorry that the book is deficient or erroneous in any respect; but it is only those who have done their duty that have any right to complain.

2. Most of those who made returns were unaccustomed to count the attendants at Church or Chapel; and some did not even know how to make an estimate. The usual error consisted, therefore, in estimating too high, and the tendency to do this is strong with the minor officials in places of worship. Perhaps this may be accounted for in part from the fact that they see the people from the same level, the intervening spaces being hid by sitters or kneelers; but there can be no doubt that in some cases there was designed and culpable exaggeration. At present this is proveable in only a few cases; but where the attendance is represented as considerably beyond the capacity of the building, there can be no doubt respecting the incorrectness of the return. I have grouped some curious figures in a note below.† The returns from Merthyr Tydvil are very

* The attendance at the 10 Churches is represented as having been 2479 in the Morning, 951 in the Afternoon, and 180 in the Evening! This return, which is obviously absurd, is the fundamental error; and it gives us in the usual way 18 Roman Catholics per cent., 14 Dissenters, 9 *bona fide* Churchmen, and 59 Non-worshipping. The correct analysis may be inferred from the following:—"When the tripartite division of the new Burial Ground was made, the population was distributed into the three sections with the greatest care; and the proportions were subjected to various rigid tests and scrutinized by all with the utmost jealousy. The result which was accepted, showed Church people 62, Roman Catholics 27, Dissenters 11,=100."

† The number in brackets denotes the number of sittings or the entire capacity of the Chapel; the numbers following shew the recorded attendance at one or more times of the day. In the greater number of religious communities, no anomalies of this kind occur, in any of the 73 great towns.

Primitive Methodists.—Bath, (434) 530; Derby, (1192) 1310; Nottingham, (1850) 1900.

General Baptists.—Coventry, (300) 397.

Wesleyan Association.—Marylebone, (198) Morning 277, Evening 336.

Wesleyan Reformers.—Bradford (810), Morning 1061, Evening 1483! Yarmouth (400), 450; Halifax (400), Morning 460, Evening 526; Leeds (200), Morning 650! Afternoon 723!! Evening 1030!!! Nottingham (600), 700.

remarkable, and I think I may say suspicious. Of eighty-four places of worship in the town, thirty-nine belong to the Independents and Baptists, and their sittings are fifty-six per cent. of the whole, but their gross attendances at the three services are sixty seven per cent. of the whole. This per centage is nearly as three to two when compared with that of the places of worship: such a result is possible, however, with great activity on the part of these two religious bodies, and great remissness on the part of the other ten which the town contains. But, on comparing their own sittings respectively with their attendants, the suspicion of exaggeration increases. Thus, in all the twenty Independent congregations, the morning attendance was ninety-three per cent. as compared with the sittings; in all the nineteen Baptist congregations it was eighty-three! Again, in the evening the twenty Independent congregations had 8,336 persons present to occupy 8,466 sittings, *exactly ninety-eight and a half per cent.!!* The nineteen Baptist congregations had 10,664 persons present, to occupy 10,864 sittings, *exactly ninety-eight and a half per cent.!!!* One is almost forced to infer, not only that the parties compared notes, but that the returns were forwarded by the same individual. Of nearly twenty thousand sittings in the two sets of Chapels, there were only 130 vacant with the Independents, and 200 with the Baptists. Every reader will compare probabilities for himself, whether it is more likely that this miracle of attendance actually occurred, or that the desire to appear important interfered with human accuracy.

Such exaggerations would be effectually cured by allowing any one, friend, foe or rival, to make the enumeration, and to attach to it an affidavit of its correctness within a few units. If the parties officially connected with the church or chapel were not prepared to guarantee the correctness of their return in a similar way, then the return with the affidavit should take precedence, and be regarded as the official one. It is probable that not more than twenty or thirty such cases would occur in all

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Lady Huntington's Connexion.—Brighton (973), Morning 1000, Evening 1150.

Brethren.—Hull (710), 800; Leeds (250), 330.

Isolated Congregations.—Leeds (280), 559; Merthyr Tydvil (305), 462.

Roman Catholics.—[In almost every instance the morning attendance far exceeds the capacity of the Chapels, the explanation usually given being that there are several morning services expressed in one. In the following examples the evening attendance only is quoted.] Bolton (600), 711; Coventry (800), 1000; Hull (628), 850; Liverpool (14,218), 15,205; Sheffield (950), 2000! Southwark (1570), 4500!!

the churches and chapels of the kingdom; for the conviction that every one was or might be watched, and that the correctness of his return might be disputed, would of itself ensure strict accuracy.

3. All the returns so made should be open to inspection for fourteen days, say at the office of the Superintendent Registrar of the District or Union. In 1851 the returns were unchecked; but this arrangement would subject them all to the scrutiny of persons in the immediate neighbourhood, to whom the general facts would be familiarly known. If any congregation were found to be omitted, either by accident or otherwise, its attendances could be supplied for the Sunday next following, and this would be infinitely better than striking averages. As Life Assurance offices select good lives, and treat them for their own interest according to the average of mortality, so negligent or interested persons would omit congregations of a merely nominal character, that they might be benefited by being treated according to the higher average of the whole country or the particular district.

4. A column immediately after the "number of Places of Worship," should state the number of Ministers engaged exclusively in duties connected with those places of worship. This would show how many, both of churches and chapels, are nothing more than preaching stations; as distinct from those in which there is a minister devoted to the congregations or to the population of a certain area. Many confound these two classes of buildings in ignorance;—others do so by design.

5. Alongside of the record of Churches and Chapels erected or opened during the ten years 1851–'61, should be another of the Churches and Chapels which have been abandoned in the same period, by the whole or a part of the existing Congregation. For example, three new churches may have been erected in some town or parish, superseding the same number of licensed rooms which were in use in 1851. It is clear that in these circumstances there would be a gain in the number of sittings and in their permanence of character, but none whatever in the number of buildings. Or, again, if twelve chapels and preaching stations have been opened, while five of those which were in use in 1851 have passed to other uses, the actual gain has been only seven. There would be no danger of enumerating the abandoned chapels twice by the members of different congregations, for by stating the name or site of each they could all be readily identified.

VI —Conclusion.

It does not appear that the injury of one religious body contributes to the success of another, or that any two of them exist in an inverse ratio. In other words, the high numbers of one do not indicate low numbers of another, but the contrary. Thus let us arrange the per-centages of Churchmen and Dissenters in the Counties from the highest to the lowest in each; and call the upper half of the per-centages high numbers and the remainder low ones. Of the 22 places which show a high per-centage of Churchmen, so many as 13 show a high percentage of Dissenters also; so that much more depends upon the moral and religious tone of any particular place than upon the success of one denomination over another. But this is not all; for if we take a smaller number such as ten places indicating the highest Church numbers, we find several of them also in the first ten Dissenting numbers; while on the contrary Surrey is 43rd in order, or the lowest but one in both scales! In the Towns, there is not the same remarkable correspondence, because the disturbing influences are more powerful in their operations;—Yet we find Colchester, Reading, and Wakefield in the highest ten of both columns, and Manchester in the lowest ten of both.

There is, however, a very marked and suggestive correspondence between the numbers which indicate the Non-worshipping community, and those which refer to the two leading religious communities. Thus the place which is highest in irreligion is that in which Dissenters have done least, viz., Southwark; the numbers being respectively 68 and 8. If we take the nine places in which the Church is weakest, seven of them are found among the 34 irreligious towns; and if we take the nine in which Dissenters are weakest, they are all found in the same 34. In Manchester, Churchmen and Dissenters are nearly equal, but the irreligious are half as many more as both together; in Oldham, Churchmen and Dissenters together are a little more than a third of the population, but the irreligious exceed three fifths.

It should not be forgotten that while much is said respecting the enlightenment and progress of our great towns, the 73 enumerated here contain 45 per cent. of a Non-worshipping community; while in the smaller towns, villages, and rural districts there are only 15 per cent.

Also, in the large towns, Churchmen diminish from nearly a half to little more than a fourth of the gross population, and Dissenters drop down from more than a third to about a fifth.

I will not touch upon the materials for thought which these facts force upon the mind, and if more than was absolutely necessary be already said, I think I may fairly plead in apology the importance of the subject. These remarks may appear late, in reference to a Census taken nine years ago; but it is only four years and a half since Mr. Mann's mode of Analysis was made public. It is even asserted by those whose interest it is still to ignore it, that it was only brought to light in reality by my public reference to it in the autumn of the past year.

APPENDIX A.

Analysis of the Population of Scotland.

The plan adopted for England and Wales, may be adopted with slight modification for Scotland. Thus if we double the number of Attenders or individual Worshippers on the Census Sunday, for Protestant Episcopalians and Roman Catholics, and add two-thirds for all others, the result is as stated below. The number and per centage of congregations is also given.

Places of Worship.	Per cent.		Worshipping Community.	Per centage.
		Presbyterians.		
1183	35	*Established Ch.* ...	756,136	26·21
39	1	*Reformed Presb.* ...	21,994	·76
36	1	*Orig. Seceders*	16,611	·57
2		*Relief*	728	·03
465	14	*United Presb.*	404,444	14·00
889	26	*Free Church*	688,674	23·84
2614	77		1,888,587	65½
134	4	Protestant Episcopalians.....	69,084	2½
117	3½	Roman Catholics	118,664	4
530	15½	Indep., Bap., Meth. & all others	129,665	4½
3395	Total.		2,206,000	76
		Balance, Non-worshipping.....	682,742	24
		Gross Population ...	2,888,742	100

APPENDIX B.

Note written for the Report on Church Rates, 1859.

Note, at the close of Answer, 1840. "For the general principles of calculation, and their application to the population of England, see in the *Journal of the Statistical Society*, the Paper read by Mr. Horace Mann, 18th December, 1854. There are modifying influences at particular points, which interfere occasionally, to a slight extent, with the results. For example, where Church and Chapel attendance is more frequent and regular than in the assumed average, the number of irreligious appears smaller than it really is, and at Bath and Colchester wholly disappears. In like manner, where there is occasional attendance, but less frequent than in the assumed average, the number of irreligious appears somewhat greater than it is in reality. Thus, the *general* results, or those on a large scale, are more correct. It is of course impossible that any such principles of calculation and their application in detail, can be absolutely perfect; but the approximate results which these afford us are incomparably more correct than any that have been attained by other means.

"It is morally certain, that in many cases the estimated attendance at Religious Worship on the 31st of March, 1851, was too high. For example, it has been ascertained on independent grounds, that the Roman Catholics in Liverpool were about 81,000 in 1851; and of these, several thousands are irreligious, or do not attend chapel. Yet these calculations give us 88,304 chapel-going Roman Catholics; a result physically impossible, yet deducible from the official record of attendance. It is clear that all these exaggerations of the religious diminish the apparent number of practical heathen in our large towns, for whom no systematic provision is made, except by the Parochial system of the Established Church."

ON THE POPULATION OF LANCASHIRE AND CHESHIRE, AND ITS LOCAL DISTRIBUTION DURING THE FIFTY YEARS 1801-51.

By J. T. Danson, and T. A. Welton, Esqrs.

PART FOURTH, AND LAST.

(READ 9TH FEBRUARY, 1860.)

IN returning once more to the Statistics of the Population of Lancashire and Cheshire, we were not without some misgivings that the number of curious and interesting facts remaining to be presented to the Society would not prove to be large; or that they would, in most cases, possess a less wide and important significance than those brought forward in the first three parts of our work.

Here, however, we were in error. The particular subjects of this Paper will be admitted to possess considerable interest for all who are disposed to examine the facts lying nearest the causes of the rise and fall of States, or the aggrandizement or decadence of particular localities.

And we cannot but express our regret, that while investigations of what are somewhat exclusively termed "natural phenomena" are even among the amusements of most intelligent persons, while such subjects as Entomology and Conchology, which have but slight apparent connexion with the larger and more obvious interests of humanity, are generally regarded as embodying useful knowledge, the study of man, and his various modes of living, with the habits and tendencies indicative of these, have only of late attracted scientific investigation, and have, as yet, but few practical observers. Yet it is not possible to doubt that the patience and industry which invariably yield the richest results when directed to subjects the most trivial, would secure an ample return if bestowed upon the studies to which we have here drawn the attention of the Historic Society; and could hardly fail, in the end, to lead to the

erection of beacons for statesmanship, and guides for the national will, far more trustworthy than those in which, with the best intentions, the leaders of mankind are now compelled to put their trust.

TABLE XXIV (ANNEXED).

In the first place, observing that the facts respecting occupations presented in our third Paper contained less of detail than might be wished, and would be useful, we have calculated the centesimal proportions of adult population engaged in some of the most important forms of employment, viz.:—

MALES.—Farmer.
Agricultural labourer (out door).
Coal miner.
Cotton manufacturer.
Silk manufacturer.
Engine and machine maker.
Labourer, branch undefined.

FEMALES.—Cotton manufacturer.
Silk manufacturer.
Domestic servant.

The results will be found in Table XXIV.

It is necessary to explain that the numbers now given refer simply to the returns under the above headings in the census of 1851; and which by some observers might not be deemed accurate in form. Those working in cotton, for example, might be made to include not only the proportions of population stated in Table XXIV., but also the cotton printers, dyers, packers and pressers, the fustian manufacturers, &c. These, however, are comparatively small classes, and the present object being to exhibit the magnitude of the largest classes, they have been disregarded.

FARMERS AND FARM-LABOURERS.

The first two columns of Table XXIV., exhibiting the proportions of farmers and agricultural labourers, will be usefully compared with the death-rates presently to be referred to. It will be seen that in Garstang, Chorley, Ormskirk and Nantwich, (the districts, in each of the four regions, in which the agricultural element is largest), the death-rates are comparatively low. This is in accordance with the now generally received idea of the effect of out-door employment on longevity.

It will also be seen, from these columns. that the relative numbers of farmers and out-door labourers differ much in particular places; but that there are only a few districts in which the labourers are twice as numerous as the farmers. In Ulverston and Lancaster, in the northern region, they are about equally numerous; but in Fylde there are nearly two labourers to each farmer. In Burnley, Haslingden, Blackburn and Rochdale, in the eastern region, there are more farmers than labourers, but in Barton-upon-Irwell there are nearly three labourers to each farmer. In the western and southern regions the labourers are throughout more numerous than the farmers, being in Warrington, Runcorn and Great Boughton nearly treble their number.

These variations are in a great measure dependent on modes of holding and cultivating the land; and these, again, on the amount of capital applicable to farming, and the demand for its produce in different localities. For instance, were *in-door* farm servants included, a somewhat different result would be obtained: these last varying exceedingly in comparative number in the several districts. Thus:—

In Warrington we have	446	farmers.
	1,422	out-door labourers.
	43	in-door farm servants.
	17	„ „ female.
Total.....	1,482	
And in Altrincham	955	farmers.
	1,810	out-door labourers.
	675	in-door farm servants.
	255	„ „ female.
Total.....	2,740	

So that a considerable apparent inequality almost disappears in the more extended view.

Also, in comparing the different counties of England one with another, in regard to the numbers of *men* engaged in agriculture, it must not be forgotten that there are very unequal proportions (in some places much larger than those here shown) of *women* so engaged in the various parts of the country. This circumstance does not, however, need much notice in the division to which our attention is at present directed.

Size of Farms.

We have already observed that in the north-western division of Lancashire and Cheshire the farms are smaller, on an average, than in any other of the great divisions of the country. It may be worth while to state the average number of acres to one farmer, in each region, thus:—

Northern..	3,961	males,	311	females,	together	4,272	farmers,	giving	118 acres each.
Eastern ..	10,494	„	1,336	„	„	11,830	„	„	55 „
Western ..	2,878	„	330	„	„	3,208	„	„	72 „
Southern..	4,981	„	684	„	„	5,665	„	„	87 „

A great part of the northern region, however, is uncultivated. Hence the comparison of total area to number of farmers is not to be relied upon.

The number of *cultivated* acres to a farmer, instead of being greater, may even be less there than in the southern and western regions. And, if so, the proportion of labourers to a farmer may, in fact, agree pretty closely with the average magnitude of the farms in the respective regions.

Coal Miners.

The proportions of the coal miners to the whole population, as shewn in the third column (Table XXIV.), point distinctly to the Wigan district as being the one most largely engaged in this department of industry. Accordingly, it will be found that, contrary to the rule prevalent in the rest of the north-western division, the immigration into the Wigan district consists principally of males. The mortality also presents some peculiar features.

The Cotton and Silk Manufacturing Population.

The figures in the 4th and 8th and in the 5th and 9th columns of Table XXIV., may be observed with a good deal of interest when we come to the death-rates.

Domestic Servants.

The distribution of these is very significant; and deserves especial attention in connexion with the migratory movements of the population, and the local distribution of the sexes.

Labourers (undefined).

The proportions of "labourers (branch undefined)" in different districts are far less equal than might have been expected; varying from two per cent.

to upwards of sixteen per cent. on the male adult population. This may have arisen partly from want of uniformity in the principle on which the class has been formed for registry in different districts; and it suggests a useful task to those living in the districts exhibiting the widest variations—that of enquiring on what this class of persons is most employed. In the absence of this information the remaining figures of the Occupation Census, for a district like Prescot, must be received with a certain caution, as liable to be delusive in regard to the relative importance of particular departments of industry, some of which, in all probability, employ a disproportionate number of these labourers. It may also be that some forms of employment, quite worthy of being distinguished, are kept out of sight by undue enlargement of the limits of this "undefined" class.

Table XXV. (annexed).

Table XXIV. may be taken as an amplification of those already given; but this deals with a department of the census we have hitherto left untouched: the condition of the adult population as to marriage.

Married and Unmarried.

It appears from Table XXV. that while the proportions out of 100 adults of each sex who are unmarried, married, and widowed, respectively, and the proportions of females, in each of these conditions, to 100 males in the like condition, are nearly the same in England and Wales and in the north-western division, the like ratios vary widely in *different parts* of the division.

It may be reasonably conjectured that these ratios depend, in a great measure, upon the rate of increase in population, and the occupations prevalent in particular districts. Other causes no doubt prevail; but their operation cannot be even approximately estimated till these have been allowed for.

The proportion of unmarried persons is highest in the northern region, and lowest in the eastern region. In the former there are ninety unmarried women to 100 unmarried men, in the latter 108 women to the like number of men.

Marriage and Mortality.

While the number of the unmarried is high in the healthy northern region, and not low in the southern region, (these being the two

portions of the division in which agriculture is the main occupation), the same result appears to be brought about in Liverpool by a very different cause. In the one case, a moderate number of marriages, being accompanied (as will be seen) by a comparatively low mortality, sustain a greater number of married couples than might otherwise be possible, and the children of these marriages being exposed to a lower rate of mortality, a sufficient number survive to fill the ranks of an increasing population, and even to send forth (from the northern region) a considerable stream of emigration. On the other hand, in Liverpool, a marriage rate which may be considered extremely high, being accompanied by a rate of mortality equally unusual, sustains a proportion of married couples not much greater than in the northern region, but accompanied by a greater relative number of births, in consequence of the smaller proportion of couples reaching old age without being severed by death. This extra proportion of births appears, however, to be far more than balanced by the infantile mortality, and, as a consequence, it follows that the population is chiefly recruited by immigration. In Liverpool, West Derby, and Wirrall, comprehending the town and suburbs of Liverpool, this is so largely the case, that to 100 males added by natural increase in 1841-51, 475 were added by immigration; and to 100 females added by the excess of births over deaths in the same period, 681 were added by immigration. These immigrants, being frequently unmarried labourers and domestic servants, do not raise the proportion of the married, but probably contribute at once to the large proportions of single men and women, and to the great ratio of annual marriages appearing on the returns.

We have been insensibly drawn into comments on figures which will be found in the remaining tables; and for this, as they are calculated to reflect light upon each other, perhaps no apology is needed. But it is well to say, before going further, that in speaking of the mortality prevailing in Liverpool and other places, allusion is made to the periods for which the figures are given, and to no others. That what we say is true of the period 1840-52 is clear, as a reference to Tables XXX. and XXXI. will shew; and a glance at Table XXVII. will give an idea as to what changes had taken place up to 1858 in the mortality-experience of the division generally.

Widows and Widowers.

The same causes (great commercial activity, and general pecuniary

prosperity, with a high death-rate) offer a solution of another phenomenon:—the low proportion of widowers, and the high proportion of widows, in Liverpool. The rapid growth and change of the population, on the one hand dissolving more marriages than ordinary (by death), and, on the other, facilitating re-marriage with women previously unmarried, directly increases both the number of widowers who marry and of widows who do not.

It may be supposed that the high proportion of widowers to widows in Liverpool is a consequence of the deaths among seafaring men whose wives reside there; but this does not appear probable when we consider that in Manchester the ratio is not much less.

Ages of Wives.

That widowers usually marry spinsters (here, as well as in the kingdom at large, where two out of three do so) may be inferred from the increasing proportion of men with young wives at the successive periods of life in the following table; showing (for the north-western division) how many out of 100 husbands at each age have wives whose ages fall within the same, the earlier, or the later quinquennial periods.

Age of Husband.	Age of Wife.					
	3 or more quinquens younger.	2 quinquens younger.	1 quinquen. younger.	same quinquennium.	1 quinquen. older.	2 or more quinquens older.
15 — 20	....	....	....	46.7	44.4	8.9
20 — 25	....	....	8.2	68.4	19.5	4.0
25 — 30	....	1.0	28.2	53.7	13.8	3.3
30 — 35	.2	6.6	31.4	46.3	11.6	3.9
35 — 40	1.6	9.7	30.6	42.6	11.9	3.6
40 — 45	3.7	11.8	29.2	40.7	11.0	3.6
45 — 50	5.6	11.9	30.2	38.8	10.3	3.2
50 — 55	7.5	13.7	28.4	37.3	9.5	3.6
55 — 60	9.2	13.5	28.7	35.4	10.4	2.9
60 — 65	11.7	15.6	26.3	35.0	8.5	2.9
65 — 70	13.9	14.6	29 8	32.3	7.4	2.0
70 & upw.	20.6	18.6	27.5	27.2	5.1	1.1
All Ages.	3.8	8.9	28.0	44.1	11.7	3.4

Manchester and Liverpool.

It should be observed that the ratios for Liverpool and its suburbs differ widely in regard to the proportions of unmarried and married men, but

less in other respects. The disproportion of widows to widowers is singularly similar in each of the three districts, which together include Liverpool; and an equally remarkable similarity of ratio in the three districts of Manchester may be pointed out. The numbers of unmarried dock-labourers resident in the district of Liverpool (proper), and of female servants (also unmarried) resident in the suburban districts of West Derby and Wirral, will go a great way towards explaining the differences observed.

The chief point of distinction between the figures for Manchester and Liverpool lies in the greater proportional number of married persons, both male and female, in Manchester. The mortality in Manchester, though large, is lower than in Liverpool, and although Manchester derives the major part of its increase from immigration, its natural increase is far more considerable than that of Liverpool.

Unmarried Males.

The eastern region generally exhibits a low proportion of unmarried males; and the principal exception to this rule is in the semi-agricultural and unprogressive district of Chorley.

In the obscure district of Garstang, in the northern region, where we found, in a former paper, the lowest proportion of immigrants from a distance, and which we shall find to be the most healthful of any, the lowest proportion of married men is also found.

The district of Leigh must be noted as one the population of which contains but a small urban element, and is not remarkable for rapidity of increase. Here we find a higher proportion of widowers than anywhere else in the eastern region: the proportions of marriages and deaths being at the same time by no means high, compared to the average of the region, and that of widows *much less* than ordinary.

In Ulverstone the proportion of unmarried males is evidently raised by the presence of a mining population. Excepting this district, and that of Liverpool, the highest proportion of this class is in Garstang, already mentioned.

The *lowest* proportion of unmarried males is found in the Stockport district, where population had during the preceding ten years (1841-51) been increasing far less rapidly than in previous decennial periods, and the tendency to marriage may consequently be supposed to have received a

decided check. If we assume that during the more prosperous times preceding 1841 the marriages in this district were comparatively numerous, and led to an increase of population greater than seemed to be required on the spot, and resulting, in the period 1841-51, in an emigration, as shewn in Table XXIX., of about 2,700 males, and 900 females (probably for the most part unmarried), we have a conjectural explanation of the very small number of bachelors here returned, and the consequently large proportion of married people.

Migration of Men, and of Women.

It does not appear that the *rural* districts of Lancashire and Cheshire part with a larger number of women than of men, by way of migration into localities where domestic service or the requirements of manufactures call for a large female population. On the contrary, the tendency of the entire division, and of each part of it, seems rather to be *to attract the women of other places* than to rearrange its own native population. Almost every district appears to have either parted with more men than women, or attracted more women than men. The exceptions are Wigan, Ulverstone, Prescot, Clitheroe, Great Boughton (Chester) and Runcorn. The three first-named are mining districts. Clitheroe shows an excess of males only in its mountainous northern portion, and especially in the sub-district of Chipping; and consequently, so far as it is engaged in manufactures, forms no exception to the rule prevalent in the eastern region, that the female population equals or exceeds the male; but the male population of its manufacturing portion having increased, while the female population has diminished (though still remaining largest) it is in that respect exceptional.

Peculiarities of Great Boughton (Chester.)

The district of Great Boughton (including Chester) presents some features of which intimate knowledge of the locality can alone be expected to furnish the true explanation. It has at present only a moderate per-centage of its population in the conjugal state, and must have shown considerably lower proportions in 1841, as the marriages have since then been rather numerous. Then the births have been so few, as to be lower, in proportion to population, than in any other part of the Division; and, after deducting a considerable death loss, leave a very small natural increase. This increase has had to be supplemented by an immigration of more than six times its number, equalling in fact more than a quarter of the total

births, and, even with this aid, the growth of the population has not been at all striking. Are we to suppose that the inhabitants of the Great Boughton district under-estimated in 1841-51 the power of the district to sustain an increase in its population ; or did its young people emigrate, in considerable numbers, to some more attractive locality; and did those remaining behind fail to appreciate the opportunity afforded them? It is certain that for some time past, the marriages have been rather numerous, compared with those in most other parts of Cheshire; and we may therefore suppose, with some appearance of probability, that the phenomena will not be the same in 1861.

Another peculiarity observable in this district is the greater immigration of males than females. The natural increase in each sex was between two and three hundred; but the immigration 2212 males and 1361 females.

The increase in the sub-districts appears to have been—

Tattenhall.....	increase	34	Males...	decrease	144	Females
Chester Castle	„	1721	„	...increase	1157	„
Cathedral Division ...	„	713	„	... „	557	„
Hawarden.....	„	37	„	... „	40	„

or, dividing the district differently,

Chester City.....	2146	Males.....	1539	Females
Remainder of District ...	359	„	71	„

What these figures indicate cannot well be discovered without more local information than we possess, or can readily obtain. One thing, however, is certain: that in spite of the other facts, there are more adult unmarried women than men in the place. The number of elderly persons, particularly women, is also large, especially as compared with the number of children. Perhaps Chester is less inhabited than formerly by families employing servants, and thus the disproportionate numbers of the sexes are not maintained, and this seems the more likely when we revert to the returns of 1831-41.

The public health in Great Boughton has not been good. The annual death rates, on an average of the three years, 1850–1–2, were, in the sub-districts:

Tattenhall	16.9	per thousand
Chester Castle	22.1	„
Cathedral Division (including the Workhouse)	27.8	„

Hawarden	17.7	per thousand
In the whole district	22.4	,,

In the ten years, 1841-50, the annual average death rates in the undermentioned districts were—

Great Boughton	23.51	per thousand
Nantwich	21.14	,,
Northwich	21.11	,,
Altrincham	20.84	,,
Congleton	21.97	,,

We have the more willingly dwelt on these peculiarities of the Great Boughton district, as it is one, especially when regarded from an historical point of view, which attracts and rewards a large amount of attention. Nor do we forget that there is, in Chester, a Society similar to our own, to which we may appeal for additional information, touching the real significance of these great national records, as they affect that ancient city and its immediate neighbourhood.

Unmarried Females.

The numbers of the female population are in some places remarkably small; and in some districts the proportion of unmarried women to 100 unmarried men is very low. These latter are Runcorn, Prescot, Ulverston, and Garstang, and (less strikingly) Northwich, Liverpool, Wigan, Warrington, and Nantwich. Most of them are among those just noticed as attracting more men than women—of the others the Liverpool district cannot be regarded separately from the suburbs, as West Derby &c., where unmarried women decidedly preponderate. Northwich, as well as Runcorn, contains a considerable number of bargemen; the excess of males in Warrington may also perhaps be traced to peculiarity of occupation. In Nantwich, where, until 1841, there appears to have been an excess of females, the railway establishment at Crewe has some influence. The excess of males in the Monks-Coppenhall township is 181. In Garstang, from 1821 forwards, there has always been an excess of males, the cause of which is not very obvious.

The districts where, on the other hand, the unmarried females are considerably *in excess* (excluding suburban districts) are Stockport, Preston, Ashton-under-Lyne, Manchester and the neighbouring districts, Bury, Macclesfield and Fylde. All these, excepting the last, are districts where

female labour is in request for manufacturing purposes; and in Fylde there is an unusual number of female servants: especially at Lytham and Blackpool. In Stockport, the proportion of females would be less excessive but for the recent emigration of males having been greater than that of females.

Table XXVI.

Here we have computed and stated the proportions of population living at different ages over ten years to the number of children under that age: exhibiting the combined effects, mainly, of occupations, as regulating migration, mortality and births. Having adopted as a measure the number of children under ten years of age, it is obvious that a low proportion of births tends, by diminishing this number, to increase the relative numbers at higher ages. This irregularity may be deemed objectionable; but it was preferred to using the total population as a measure, because that would have been seriously disturbed by any peculiarity in the migration into or from the district. The number of children does not seem to have been materially affected by migration: there being nearly the same numbers of each sex at the ages 0-5 and 5-10.

Number of Children.

The number of the population having among them 100 children under ten years of age, is nearly the same in England and Wales and in the north-western division. But, in the different districts composing the division it ranges from 361 to 448. For the better understanding of this part of our subject it is advisable to separate the period of life between the ages of ten and forty from that after forty. We shall then perceive that the main feature developed is an excessive number at the ages ten to forty, and a defective number over forty years of age, in the eastern and western regions. And it will be remembered that these are the most characteristic and important parts of the division. In the northern and southern regions the number aged ten to forty is defective; and the number after that age attains nearly a full proportion.

In the	Northern Region	to	100	aged 0 to 10	there are	197.7	at 10 to 40 and	98.9 over 40
„	Eastern	„	100	„	218.6	„	86.1	„
„	Western	„	100	„	224.1	„	83.3	„
„	Southern	„	100	„	200.9	„	92.5	„
„	N. Western Division		100	„	217.1	„	86.8	„
„	England and Wales		100	„	206.6	„	97.1	„

Two facts are prominent here: (1) In the northern and southern regions of our division of the kingdom, the children are, in number, *above* the English standard; and in the eastern and western regions they are *below* it. (2) In the northern region alone does the number *over forty* come up to the English standard.

Youth and Maturity.

It is also remarkable that while, in the eastern region, the excess at the ages ten to forty is most commonly found among those aged ten to twenty-five, in the western it is chiefly in the population aged twenty-five to forty. In other words, the element of youth decidedly predominates in the great manufacturing district; and in the great commercial district we have a like excess of persons at the most active period of life. Thus:—

	To 100 Children aged 0-10 years			
In the Northern Region there are	117.1 aged 10 to 25,	and	80.6 aged 25 to 40	
„ Eastern „	127.7	„	90.9	„
„ Western „	123.3	„	100.8	„
„ Southern „	119.1	„	81.8	„
„ North-Western Division	125.4	„	91.7	„
„ England and Wales	120.2	„	86.4	„

This circumstance has an evident connection with the extensive employment of young persons in the manufacture of cotton; and of clerks, dock labourers, and domestic servants in the western or Liverpool region.

The large numbers at ages from ten to forty, with the low proportions at the higher ages, in the manufacturing and commercial localities, doubtless arise from the comparatively small populations of these places in the preceding decennial periods causing many fewer births than at present, while the immigration of young persons has greatly swelled the ranks of those in middle life; and the very considerable infantile mortality has since hindered the children proper to such a population from attaining a greater proportion to its total number.

Maturity and Old Age.

The numbers at 55 to 65, and at 65 and upwards, compare thus:—

	To 100 Children aged 0 to 10 years			
In the Northern Region there are	23.6 aged 55 to 65,	and	21.4 aged 65 and upwards.	
„ Eastern „	18.7	„	12.4	„
„ Western „	16.5	„	10.3	„
„ Southern „	21.5	„	18.2	„
„ North-Western Division	18.7	„	13.0	„
„ England and Wales	22.7	„	18.7	„

The state of the western (or commercial) region is very remarkable. No inference would here be safe as to longevity in the different regions; but the actual composition of the population, as here exhibited, cannot fail to have a corresponding influence on the state of society in each.

Disturbance by Migration.

So far as the figures enable us to judge, we conclude there must, formerly, have been a considerable disturbance, by emigration, of the age-distribution of the population of the northern and southern regions, particularly as to the women:—the proportions of population at the several ages being as follow, when compared with the average for England and Wales:—

	Northern Region.		Southern Region.	
Ages 10–25	+ 0.8 Males	— 3.9 Females	+ 0.4 Males	— 1.5 Females.
„ 25–40	— 1.4 „	— 4.4 „	— 1.0 „	— 3.6 „
„ 40–55	— 0.1 „	— 1.7 „	— 0.7 „	— 2.2 „
„ 55–65	+ 0.7 „	+ 0.2 „	— 0.5 „	— 0.7 „
„ 65 and upwards	+ 1.7 „	+ 1.0 „	— 0.0 „	— 0.5 „
or,				
„ 10–55	— 0.7 „	— 10.0 „	— 1.3 „	— 7.3 „
„ 55 and upwards	+ 2.4 „	+ 1.2 „	— 0.5 „	— 1.2 „

Consideration of the corresponding figures for particular districts, as stated in Table XXVI. and more particularly in the census, will possess much interest, and might afford profitable occupation for local observers disposed to aid or correct our enquiries. Of course it will not be forgotten that a depressed birth-rate tends to raise the proportional numbers in Table XXVI.; and this has actually occurred in the following places in our division:—

Northern Region —No district relatively very low.

Eastern Region.—Preston, Leigh, Stockport, and Macclesfield.

Western Region.—Ormskirk.

Southern Region.—Congleton and Great Boughton.

The marriage-rate in Altrincham has been very low; but there is nothing in the birth-rate 1841–50 to account for the excess of people at the higher ages, compared with children; and this is possibly ascribable in some degree to the salubrity of the place, which appears to be the healthiest in the southern region.

The subject of migration is a good deal cleared up by this table. It

appears, for example, that the disproportion of the sexes in Runcorn and Northwich, arises rather from an emigration of women (somewhat exceptional) than an immigration of men. Again, the influence of former immigration, modified by recent emigration, is very visible in the figures for Stockport. It is, probably, the high rate of mortality, after infancy, in Congleton, that prevents the immigration of females into that place from producing a more marked effect. The district of Ormskirk would appear to have parted, in times past, with a large part of its population, both male and female; and it does not seem likely that that of Leigh has always been able to attract a greater number than it lost. The infantile death-rate in Lancaster seems quite enough to cause the relatively high numbers at the ages above ten years.

In these remarks we have rather indicated the uses of Table XXVI. than exhausted the comparisons to be deduced from it. Each reader will perhaps be able to find something in that Table falling within the range of his particular knowledge, and capable of interesting him. And if what we have said, or the figures we have brought together, should thus elicit further information, we shall be the better pleased with the result of our labours.

Table XXVII.

Here we have given the figures for each of the twenty years 1839–58: showing, for England and Wales, and also for our own division, (1) the estimated population on the 1st of January in each year, and the number of (2) marriages, (3) births, and (4) deaths, *during* each year, to one thousand persons living at its *beginning*.

It will appear, on examining this table, that the proportions of marriages, of births, and of deaths, have all been *constantly much higher* in the north-western division than in the kingdom at large, ranging, comparatively, as follows:—

	England and Wales.	North-Western Division.
Marriages	7.41 to 8.98	7.84 to 10.47
Births.....	31.63 to 34.62	35.22 to 39.17
Deaths	20.56 to 25.33	24.00 to 34.17

In every year of the twenty the *birth-rate* in the division exceeded the *maximum* rate in England and Wales. In eleven out of the twenty years the marriage-rate exceeded the maximum. And in fifteen of the twenty years the death-rate exceeded the maximum of England and Wales. We will not attempt to indicate the range of reflection suggested by these remarkable differences.

The diminished ratio of *illegitimate* births is worthy of notice; and it is observable how closely the marriage, the birth, and even the death-rates of England, though in amount so different, correspond, in their *variations* with those of Lancashire. Beginning with the year 1839, the marriage-rate sank gradually until 1842, then rose steadily until 1845, becoming low again in 1847, again rising year by year till 1850, remaining high until 1853, afterwards sinking till 1855, rising again in 1856, and declining until 1858: when the lowest figure since 1847 was reached, in both the kingdom and the division. Here we have, strongly marked, the operation of what may be termed periods of prosperity on the tendency to marry. And it is at least probable that in this variation there is present, besides an improvident haste to take advantage of "good times," a good deal of the self-denying determination to wait for such times.

Table XXVIII.—Marriages.

Here we give the actual numbers of marriages, in each district, in the most remarkable of the years referred to, and it will be observed that the numbers in the good year 1845 and the bad year 1855 in the entire division were nearly equal, the larger population having, under adverse circumstances, come down to the marriage-rate of the smaller. Comparing 1845 and 1847 with 1853 and 1855 we get, in each case, a bad and a good year, and an average interval of eight years. This shows for the several regions:—

Northern	1,658	in 1845 and 1847	against	1,759	in 1853 and 1855.
Eastern.....	26,702	"	"	31,774	"
Western	11,111	"	"	12,489	"
Southern	3,373	"	"	4,044	"
N. W. Division	42,844	"	"	50,066	"

Here, however, it is to be remembered that the prosperity and adversity referred to bore differently on different localities; and that the population was increasing at very different rates.

The number of marriages in Stockport having again become high, it may be safely assumed that that place has regained something of its former prosperity. The marriage-rate seems to be more immediately and powerfully acted upon in Manchester than in Liverpool. But this Table deserves a minute and careful examination by the light of adequate local knowledge.

TABLES XXIX. AND XXX.

The second of these is chiefly composed of ratios derived from the first; and, together, they carry the comparison of the rates of birth, marriage, and death, in different parts of our district, as far into detail as probably they can at present be usefully carried.

The *natural increase* of population in 1841–50 as shewn in Table XXIX. will no doubt differ, in some measure, from that between the periods of the censuses of 1841 and 1851, as these were not taken at the commencement of the respective years; but probably not to the extent of more than about two per cent. The two periods 1st January, 1841 to 1st January, 1851, and 6th June, 1841 to 31st March, 1851, have, for the purposes of these two Tables, been assumed to be practically identical; and any difference between the actual increase and the approximation to the natural increase thus obtained has been taken as arising wholly from immigration or emigration.

It appears then that the movement of the population, in the entire division, between the last two censuses, was—

Births	828,264
Deaths	609,822
Natural Increase	218,442
Immigration	200,410
Total Increase	418,852

In the two great towns and their suburbs the similar figures were—

	LIVERPOOL.	MANCHESTER.
Births	153,334	155,764
Deaths	135,313	123,738
Natural Increase	18,021	32,026
Immigration	102,654	73,306
Total Increase	120,675	105,332

In the rest of the division the corresponding figures were—

	Northern Region.	Southern Region.	Residue of Eastern & Western Regions.
Births	37,242	74,003	407,921
Deaths	23,112	53,957	273,702
Natural Increase ..	14,130	20,046	134,219
Immigration	— 10,462	929	33,983
Total Increase	3,668	20,975	168,202

Thus it appears that while Liverpool and Manchester increase principally by immigration, four-fifths of the increase in the remaining portions of the eastern and western regions was derived from the excess of births over deaths, and the northern region alone could send off upwards of ten thousand emigrants and still exhibit a net increase of population.

The large emigration from Chorley (Table XXX.) deserves notice. It is ascribed to cessation of work at some coal pits, from exhaustion of coal, and to substitution of power-looms for hand-looms. Several of the features of Table XXIX. have already been noticed. The large emigration of males, compared with females, from Fylde, seems to have arisen from the completion of the harbour at Fleetwood, where in 1841 a large number of men appear to have been employed.

It will be observed that the silk-manufacturing places are among those which attract the greatest numbers of women, compared with men. Congleton even parts with a portion of its male population, while attracting as many females as suffice to more than double the natural increase of that sex.

Fertility of Marriages.

Considerable difficulty, traceable to defect of information in the census, was found in exhibiting, in Table XXX, a reliable set of indications of *the comparative fertility of marriages* in the different parts of the division. It can only be done imperfectly.

The following Table shows the proportions of the marriageable, but unmarried, to the total population, at several ages, for the division :—

Ages.	Per Cent. Unmarried. Males.	Females.	Ages.	Per Cent. Unmarried. Males.	Females.
15–20	99.3	97.1	45–50	12.0	12.1
20–25	76.3	67.1	50–55	11.4	11.5
25–30	42.0	39.2	55–60	10.2	10.9
30–35	25.6	24.7	60–65	9.7	11.3
35–40	17.4	17.7	65–70	8.7	10.8
40–45	14.4	14.1	70 and upwards.	8.0	9.9

But we are not supplied with this order of facts for the districts separately; and are therefore precluded from comparing the number of births in them with the number of married women aged twenty to forty-five.

Our sole resource, therefore, was to compare the births with—

1. Women aged 20 to 45, including the unmarried and widowed.
2. Wives aged 20 and upwards, including many above 45 years of age.

It appears on a comparison between the north-western division and England and Wales, that the proportions were respectively:—

	N. W. Division.	England and Wales.
Per Centage of Women aged 20–45 who were Married....	58.65	59.15
„ Married Women aged 20 years and upwards whose ages were under 45 years	71.23	66.21
Annual Births (average of three years, 1850–2) to 100 *Married* Women aged 20–45.....	32.15	30.83

We may therefore rest assured that if the number of births is small, compared with that of marriages, in some of the largest places, this is probably the result rather of the height of the marriage-rate being disproportioned to the number of the married, than merely to a low birth-rate in proportion to the number of married women at the child-bearing age.

The number of births to *a marriage* (without reference to the ages of the married) is shown, for the two periods 1841–50 and 1850–52. In both periods the number was low in the following places:—

	1841-50.	1850-2.	Marriages per 1,000 persons 1841-50.	Per cent. of Women 20 and upwards in married state. 1851.
Manchester, Salford, and Chorlton Barton-on-Irwell	2.9	3.1 2.4	12.83	56.6 to 58.4
Liverpool, West Derby, and Wirrall	3.4	3.2	11.13	54.5 „ 55.9
Rochdale	3.5	3·2	10.69	61.3
Great Boughton	2.8	2.9	8.74	55.4
The average of England and Wales being	4.0	3.6	8.02	58.7

The figures, above given, show that (everything else being equal) there were good reasons for the proportions of births to marriages in these places being low, inasmuch as, in every case, the marriages bore a higher proportion to the numbers already married than in England and Wales; and therefore afforded an exaggerated idea of the *total numbers* of women in the married state.

It is however abundantly evident, that with reference to any detailed comparison, very little dependence can be placed on these ratios of births to marriages; and they are introduced partly to make this apparent.

The ratios of births to 100 married women are defective because the numbers of aged women vary so much in particular places. And to this circumstance almost entirely may be attributed the seemingly high ratios in the eastern and western regions. Again, when we look at the figures for Liverpool, and remember this defect in our materials, it is impossible to resist the inference that, in 1850-2 at least, the births there were not high, in proportion to the number of married women under forty-five years of age. The same may be said of several other places.

The column in Table XXX. most worthy of reliance is probably that shewing the proportion of births to women aged twenty to forty-five, when taken in connection with the proportions of women married, thus:—

	Births in 1850-2 to 100 Women aged 20-45.	Per centage of Women aged 20 and upwards who were Married, in 1851.	Estimated Births per 100 married Women aged 20 to 45.
Great Boughton	15.1	55.4	27
Liverpool	15.6	54.7	29
Wirral	16.2	55.9	29
West Derby	16.4	54.5	30
Barton-on-Irwell	17.0	56.6	30
Macclesfield	17.4	58.7	30
Chorlton	17.8	56.7	31
Stockport	17.9	59.3	30
Lancaster	18.2	53.4	34
Manchester	18.3	56.8	32
Altrincham	18.3	54.7	33
Congleton	18.3	61.2	30
Fylde	18.4	55.0	33
Ashton-under-Lyne	18.4	60.0	31
Salford	18.5	58.4	32
N. W. Division	18.9	58.3	32
England and Wales	18.2	58.7	31

We have just had occasion to observe that the proportions of women aged *twenty to forty-five* living in 1851 in England and Wales, and in the north-western division, who were married, do not differ materially from those of women aged *twenty and upwards* who were in the same condition.

If we assume the same to be true of the districts just enumerated, the numbers on the right will represent (nearly) the ratios of births per 100 *married* women aged twenty to forty-five; these confirm the impression derived from the ratios to 100 married women (simply) and tend to shew that the birth-rates in Liverpool, Great Boughton, Macclesfield, Stockport and Congleton, are low; and that those in Manchester and its suburbs, and in Ashton-under-Lyne, are at all events not far above the average.

The birth-rate in Wigan appears to be very high. Perhaps local explanation might bring this ratio nearer to the average.

Marriages and Bachelors.

The marriages would best have been measured by comparison with the number of unmarried men at the entire marrying age, but as we cannot obtain the necessary information for doing this from the census, we are obliged to measure them by the total number of unmarried males aged twenty years and upwards.

This gives the following annual ratios for the three years 1850–2:—

Northern Region	7.5	Marriages	per 100 Bachelors.
Eastern ,,	14.3	,,	,,
Western ,,	11.5	,,	,,
Southern ,,	9.3	,,	,,
N. Western Division	12.7	,,	,,
England and Wales	10.9	,,	,,

The highest local ratio was in Stockport, where there had been, previously, much commercial depression. There the marriage ratio reached 19.1 per 100 bachelors. The lowest ratios were in Garstang and Altrincham—5.4 per 100 bachelors. In Manchester the rate was very high, much higher than in Liverpool. In Chorley, Leigh and Oldham it was low.

Marriages to Population.

Measured by the total *population*, the marriages in 1841–50 gave the following annual proportions:—

Northern Region	6.59	per 1,000 persons.
Eastern ,,	9.29	,,
Western ,,	10.30	,,
Southern ,,	7.20	,,
N. Western Division	9.14	,,
England and Wales	8.02	,,

In Manchester, Liverpool and Rochdale, the ratios were highest; and

in Altrincham, Northwich, Ormskirk, Garstang, Oldham and Ashton-under-Lyne, they were very low. In Chorley, Leigh, and other places the marriage-rate was far from high.

The column last commented upon, and those of births and deaths per 1,000 persons living, are chiefly valuable as throwing light upon the facts disclosed by Table XXVII.

The birth and death columns (of Table XXX.) also have much meaning when looked at in reference to natural increase of population, as indicating whether this arises mainly from low death-rates, from high birth-rates, or from some other cause. The column shewing the average annual real increase per 1,000 persons is intended to aid in making these comparisons. Thus :—

	Births.	Deaths.	Difference or natural increase.	Actual increase.
Northern Region	31.00	19.24	11.76	3.1
Eastern ,,	37.33	26.51	10.82	18.1
Western ,,	37.55	31.47	6.08	27 8
Southern ,,	31.04	22.63	8.41	8.8
N. Western Division	36 38	26.79	9.59	18.4
England and Wales	32.48	22.31	10.17	11.6

Here it will be seen that the lowest birth-rate being accompanied by a still lower comparative death-rate, is followed by the largest natural increase; while the highest birth-rate is, from a similar cause, followed by the smallest natural increase. This makes apparent the importance of the manner in which an increase of population is attained; and the consequent local value of the materials we have brought together for its examination and consideration, as to different localities in our own division of the kingdom.

Births and Deaths to Population.

Enough has perhaps been said about the relative numbers of births and of married women. It only remains to be noticed that the actual proportion of births to population was lowest in this period (1841–51) in Great Boughton and Congleton, and singularly high, by comparison in Northwich —all in the southern region. It was highest in Bolton, Blackburn, Oldham, Wigan and Bury. Next to these places come Liverpool, Haslingden, Burnley, Rochdale, Ashton and Manchester. It was comparatively low in Macclesfield, Stockport, and Preston.

It will be observed that in Oldham and Ashton-under-Lyne, where the marriage-rate during the ten years 1841–51 was only 5.93 per 1,000

persons, the number of births remained comparatively large, and, in Preston, where the corresponding marriage-rate was 8.93, the number of births was relatively low. So much do the marriages already in being affect the figures, when taken together with those occurring year by year.

The low proportion of births in Congleton, in spite of a large ratio of persons in the wedded state, is not easy to understand. We want local information. The ratios of births for 1850–2 in this district are not so remarkable. Whatever the cause previously in operation it would appear to have ceased; as the births had considerably increased.

The death-rates in Table XXX. (already referred to) shew that the excess of mortality in the division is traceable to causes operating chiefly in the eastern and western regions: the rate in the northern region being low, and that in the southern region not differing materially from the average of England.

It has already been pointed out that the mortality in Great Boughton is high; and an attempt has been made to indicate the locality of the excess; but this is always difficult to do for sub-districts, through the influence of public institutions, such as work-houses, which sometimes bring into one sub-district all the deaths of the paupers of the district, and hospitals, which have a similar effect.

We have now to call attention to the peculiar death-rate in the Lancaster district. This appears to have been much raised by a special mortality in the sub-district of Lancaster. The mortality in each of the sub-districts was, in 1850-52 :—

Ellel	population	3686.....17.7	per 1000 persons
Heaton	„	2587.....18.9	„
Lancaster	„	18292.....28.6	„
Caton	„	2119.....24.5	„
Wray	„	2528.....20.3	„
Tunstall	„	925.....13.0	„
Arkholme	„	931.....19.3	„
Warton	„	3592.....19.6	„
The whole district	„	34660.....24.3	„

But a better medium of comparison, between districts, as to vitality, will be afforded by Table XXXI., to which we now proceed.

TABLE XXXI.

The unequal distribution of the population, as to age and sex, in the

different districts, renders it imperative, in ascertaining the comparative death-rates, to take both elements into account, for each district. Before forming this table (XXXI.), the following figures were computed on the census of 1851:—

DEATH RATES AT DIFFERENT AGES IN EACH SEX.

AGES.	Annual average deaths, per cent. in 1850-52.				Female compared to Male Death Rates.		Excess per cent. of death rates in N.W. div., compared with England and Wales.	
	Eng. & Wales.		N.W. Division.					
	Males.	Females.	Males.	Females.	Eng. & Wales.	N.W. Division.	Males.	Females.
0— 5	7.18	6.18	9.93	8.56	— 1.00	— 1.37	38	39
5—10	.87	.85	1.19	1.12	— .02	— .07	37	32
10—15	.49	.52	.60	.59	+ .03	— .01	22	13
15—25	.76	.81	.87	.90	+ .05	+ .03	14	11
25—35	.94	1.00	1.04	1.14	+ .06	+ .10	11	14
35—45	1.22	1.21	1.44	1.47	— .01	+ .03	18	21
45—55	1.76	1.52	2.18	2.01	— .24	— .17	24	32
55—65	3.02	2.66	3.82	3.35	— .36	— .47	26	26
65&up.	9.22	8.67	10.10	9.44	— .55	— .66	10	9

It thus appears that the ages 0—5, and 45 and upwards, are those at which the male mortality is generally highest, compared with that of females. And on considering the mortality in the North-western division, as compared with that in England and Wales, we were further led to distinguish the mortality at ages 5—10 and 45—65, as it appears that in these periods of life the Lancashire mortality is more excessive than between 10 and 45, and after 65 years of age.

DEATH RATES IN DIFFERENT DISTRICTS.

Table XXXI. was then framed, and will be found to present many remarkable results. The following abstract embodies some of the most striking.

AGES.	Annual average Death Rates per cent.								Female compared to Male Death Rates.			
	Northern Region.		Eastern Region.		Western Region.		Southern Region.					
	Males.	Fem.	Males.	Fem.	Males.	Fem.	Males.	Fem.	N. region.	E. region.	W. region.	S. region.
0— 5	5.53	4.63	10.53	8.87	10.58	9.58	6.93	6.20	— .90	—1.66	—1.00	— .73
5—10	1.08	1.09	1.19	1.07	1.31	1.32	.98	.98	+ .01	— .12	+ .01	....
10—45	.88	.99	.97	1.05	1.08	.99	.87	.98	+ .11	+ .08	— .09	+ .11
45—65	2.00	2.06	2.78	2.58	3.15	2.63	2.39	2.08	+ .06	— .20	— .52	— .31
65&up.	9.04	8.21	10.23	9.73	11.42	9.47	8.76	8.86	— .83	— .50	—1.95	+ .10

The death rate among children under 5 years of age was, in every district of the division, less among girls than among boys; and this is in accordance

with the experience of the country at large. But the excess of deaths among *male* children was particularly great in the *Eastern* region.

Between 5 and 10 years of age, the death rate was nearly equal in the sexes; except in the *Eastern* region, where, again, the mortality of *boys* was comparatively high.

At the ages 10—45, where the excess of death rate would (naturally) be on the side of the females, to the extent of about 5 per cent., the excess is found in greater proportion, excepting in the Western region, where the *male* mortality considerably exceeded, even at this period of life, that which took place among females.

At the ages 45—65, the excess of the death rate ought, according to the experience of the whole country, to be among the males; and it was so, in every region except the Northern: being particularly heavy in the Western region.

At the higher ages, too, there should be, and there is, a state of things similar to that just mentioned; but again with an exception in the Southern region; and the greatest excess of male deaths again occurring in the Western region, as before.

Death Rates in each Region.

On calculating the excess per cent. of mortality in each of the four regions, as compared with that in England and Wales, we obtain the following table:—

Ages.	North Western Division.		Males.				Females.			
	Males.	Fem.	N. reg.	E. reg.	W. reg.	S. reg.	N. reg.	E. reg.	W. reg.	S. reg.
0— 5	38	39	— 23	47	47	— 3	— 25	44	55	..
5—10	37	32	24	37	51	13	28	26	55	15
10—45	15	16	4	14	27	2	11	18	11	10
45—65	23	27	— 11	23	39	6	4	30	33	5
65&up.	10	9	— 2	11	24	— 5	— 5	12	9	2

It would thus appear that in the northern and southern regions there was a rate of mortality lower, on the whole of life, than that prevalent in England and Wales; but at the ages 5–10 rather higher. That this arose immediately from an outbreak of Scarlatina, in 1852, is almost certain; and substituting the mortality of 1855 (selected as a year not affected by Cholera) for that of 1852, we get rid of the anomaly.

Scarlatina destroyed in the north-western division

in 1850	629	males	597	females.
„ 1851	1407	„	1375	„
„ 1852	3114	„	2830	„
„ 1855	1706	„	1612	„

This seems to be the most fatal disease at the age 5–10 years.

Substituting the mortality of 1855 for that of 1852, and retaining the same population as a divisor, we obtain the following results:—

	Annual Mortality per Cent. at Ages 5–10 Years.		Difference per Cent. Compared with Eng. & Wales	
	Males.	Females.	Males.	Females.
Northern Region.....	.65	.66	— 24	— 21
Eastern „	1.05	.95	+ 24	+ 13
Western „	1.29	1.35	+ 52	+ 61
Southern „	.73	.77	— 14	— 8
N. Western Division	1.05	1.00	+ 24	+ 19
England and Wales.....	.85	.84		

It will be seen that the position of the northern and southern regions, compared with that of England and Wales, is here reversed—becoming much better than the national average.

The mortality in the eastern and western regions was much *above* the average of England and Wales, though not so excessive at the ages 10–45, and above 65, as at other periods of life. This may arise, so far as concerns the ages 10–45, from the immigration of large numbers of healthy persons, whose condition, gradually deteriorating, has less influence in lowering the general death rate after they pass 45 years of age.

A few examples of the rates of mortality prevalent in particular districts will further display the uses of Table XXXI.

If we place in juxtaposition Garstang, Manchester, Ormskirk, Liverpool and Macclesfield, we have:—

Ages.	Death Rates of Males.					Death Rates of Females.				
	Garst'g	Manch.	Ormsk.	Liverpl.	Maccles	Garst'g.	Manch.	Ormsk	Liverpl.	Maccles
0–5 ..	4.43	13.26	5.54	14.06	8.81	3.19	11.41	5.16	12.94	7.57
5–10..	1.30	1.29	.87	1.56	1.21	.99	1.12	.89	1.57	1.20
10–45..	.62	1.16	.84	1.29	1.02	.78	1.09	.91	1.13	1.28
45–65..	1.71	3.85	2.25	3.73	2.41	1.44	3.39	2.10	3.05	2.51
65 & upds	7.20	11.59	8.96	13.68	9.69	7.51	10.46	7.35	10.69	10.83

Disregarding the figures at ages 5–10, we have here a striking contrast between two agricultural rural districts and two commercial town districts. It is greatly to the advantage of the former, as might be expected. And then we have a silk manufacturing place with high *female* death rates—in fact the highest in the division at ages 10–45; and only second to Ashton-under-Lyne at the ages above 65.

Many will be prepared for large differences in the death rates of these districts; but few will perhaps expect such as this abstract shows.

The tables of occupations will be found very useful for comparison with those now given. For example, the low death rate in Chorley is most probably connected with the comparatively large proportion of persons observed to be employed in agriculture in that district. And so with many other instances, which the space at our disposal does not permit us to point out, but which will become obvious to any who shall take the trouble of examining and comparing the tables for themselves.

And now, having completed our task, so far as the details are concerned, we will endeavour shortly to sum up the information thus gathered.

First.—The local area of our inquiry extends for the most part over a dense and rapidly increasing population: a population which has been increased in fifty years by 1,618,274 persons. Excepting London, it now presents to us the most densely peopled spot, of anything like the same extent, in Europe. The characteristics of density and rapid growth have been carefully distinguished, by making it clearly apparent where, in our division, they do, and where they do not exist, with indications in each case of their actual and comparative extent—considered locally.

Secondly.—The rapidity of increase of the population has been shewn to have taken place chiefly in the larger towns, but it has also been shewn that increase as rapid has occurred in some districts which cannot at present be properly termed towns.

Thirdly.—The locality of greatest increase, during the fifty years, having been determined, the precise period of its actual occurrence has also been shewn. It thus appears that in the towns this took place, more especially, in the period 1821-31; and, in the country districts, just previously, or during the first twenty years of the century. Then it has been made

apparent that while, in most parts of the country districts, a rapid and general increase was taking place in the first twenty years of the century, the same state of things was not maintained in the ten years 1821–31; and further, that in the following twenty years 1831–51, it was succeeded, in these country districts, by an equally remarkable tendency to decrease.

Fourthly.—The first part of our third paper was devoted to a further inquiry into the nature of the changes which had thus taken place in the distribution of the population during the fifty years. And it was found that while a large part of the division was still thinly peopled in 1851, and, although much of the great increase that had previously taken place had been added to populations already comparatively dense at the beginning of the century, still a large augmentation had also been made of the extent of thickly peopled *parishes*, particularly in the eastern or manufacturing region. The real meaning of average densities, is apt, for the most part to escape those who deal with such inquiries only in a cursory manner. We trust this third paper has done something towards rendering it clearer.

Fifthly.—The extent, the time, and the place, of the increase having been shewn, the *manner* in which it was attained, still remained to be inquired into. This question has been answered; not, indeed, in the best manner conceivable, but, we trust, intelligibly, and, we believe, as well as the materials at our disposal would permit, by an investigation of the birth places of the present inhabitants, and of the statistics of births and deaths during a portion of the interval—as these are to be gathered from the Census, and the Annual Reports of the Registrar General.

The first inquiry informs us (1) that in no part of the kingdom is there so strong a tendency to retain those born within its limits as in our own (the north-western) division; (2) that this division has also made large additions to its population by immigration from the adjoiuing counties, and especially those lying within fifty miles of its frontier; and (3) that Ireland and Scotland have also sent in large numbers of their people to share its prosperity. The net result being that the division contained in 1851:—

925,423	Adult	Natives	of	Lancashire and Cheshire.
180,688	,,	,,	,,	Counties within 50 miles.
58,333	,,	,,	,,	Counties beyond 50 miles limit.
24,618	,,	,,	,,	Scotland.
154,265	,,	,,	,,	Ireland.
8,503	,,	,,	,,	Colonies, Foreign Parts, &c.

The local distribution, within the division, of the immigrants from the nearer, and also from the more distant places, has been separately traced; and it has been shewn that those who came the greatest distance, are attracted almost exclusively by the large towns. It may even be surmised that, excluding the immigration to our largest towns, the increase by way of immigration is derived in the main from a circle of very moderate radius from the increasing place. If this surmise be correct, it is obviously one of considerable importance.

Sixthly.—The occupations of the people of the north-western division have been made the subject of a separate inquiry; and it has been shewn that while it undoubtedly derives from its textile manufactures the position it holds in the greatest department of English industry, yet its coal mines, its metallic manufactures, and its agriculture, are also such as would alone render it remarkable in an industrial point of view. The number of its inhabitants employed in agriculture is peculiarly large; and it would be satisfactory to be assured that this number is not to any extent maintained in the service of an unscientific and inferior system of culture, involving a large expenditure of human labour for a moderate result, and only rendered profitable by the proximity of large markets. That the circumstances of the eastern and western divisions are such as to afford a strong stimulus to the investment of both capital and skill in this branch of the national industry is sufficiently obvious, and we should be glad if other members of the Society better informed on the subject could adduce trustworthy evidence of the actual effect of this stimulus.

Another important feature developed by this part of our inquiry is the very large number of the commercial class, in Liverpool and its suburbs; a number scarcely paralleled even in the metropolis.

Seventhly.—The civil conditions of the adult inhabitants have been examined, and it has been found that the large measure of material prosperity which the division has enjoyed has been accompanied, in accordance with what now is generally expected, by numerous marriages. It may also be inferred, in connexion with this part of the subject, that had it not been for the high rate of mortality, with which the division has had to contend, a much smaller immigration would have sufficed to meet the demand for additional labour. It is also evident that this unfavourable circumstance, terminating many marriages by death at an early period,

together with a large immigration of unmarried persons, has prevented the ratio of the "married" to the total population rising higher here than the average of the kingdom. And there can be little doubt that the same circumstances have operated to render the number of widows, in some places, so disproportionately high compared with that of widowers.

The peculiarities of the more densely peopled parts of the division have, all through the enquiry, been rendered more striking by comparison with the more thinly peopled regions of the north and south; in which the slow increase of population, the absence of large towns, and the small proportion of manufacturers, are accompanied by moderate numbers of marriages and births, and comparatively favorable death rates. Whatever is said of the division at large, and especially of those sections of it by which it is best known elsewhere, the reverse is almost sure to be true of its northern and southern regions.

The proportions of the married of each sex, and of the sexes to each other, supply material for comments which might easily be extended. The opposite circumstances of Stockport and Great Boughton, for instance, appear to us to possess much interest.

Eighthly.—The ages of the population, as measured by comparison with the number of children who had not completed their tenth year, form the subject of another table. This affords evidence of the augmented numbers at ages 10-40, attributable to the immigration of large numbers in youth and early maturity; while the smallness of the numbers at the higher ages, is clearly traceable to the combined effects of a high ratio of mortality, and the rapidity of increase by birth and immigration, dwarfing the past and passing generations by comparison.

It is also apparent that the effect of the immigration (pointing, also, to its motive), has been to bring the relative numbers of the sexes, and at particular ages, into something like harmony with the wants of the various departments of industry, and the same figures enable us in some measure to discover by what particular migrations the existing inequalities in the numbers of the sexes have been brought about.

Ninthly.—Our somewhat lengthened investigation of the ratios of marriages, births and deaths, leads to the conclusion that the general prosperity of the country depends upon like causes with that of the north-western division: the marriages in both showing a constant coin-

cidence in their variation. The death rate in the division continues lamentably high, and, as might be expected, the births are almost equally in excess of the national average.

This part of the subject is closely connected with that dealt with under the fifth of these remarks. We have it in our power to determine, very nearly, the natural increase of population between the last two censuses,—and thus to find the number and sex of the immigrants during the interval of ten years. We learn that the immigration has been composed of a larger number of women than of men, and that (combined with migrations within the division), it has led to the addition of 102,654 to the population of Liverpool, and of 73,306 to that of Manchester, the other parts of the division gaining only 24,450 by immigration;—but we also find that while the natural increase in Liverpool has been only 18,021, and in Manchester 32,026, the other parts of the division have added to their population, in this manner, as many as 168,395 persons.

The fertility of marriages has been enquired into as well as the imperfect information obtainable would allow, and with the more care, because, at first sight, it seemed not improbable that from the absence of homely domestic habits in our large manufacturing and commercial towns, a depravation of the race might be going on in such localities, of which a want of fecundity in women, and a high rate of mortality among the children born, would form prominent features. It might also be that the apparently low birth rates were occasioned by the non-registration of an unusually large number of still-births. But although the birth rates are not perhaps as high as they might become, were the operative classes more comfortable and domesticated, there does not seem to be any thing about the figures to justify the fear that the evils under which these classes labour are not easily removable, or even that they are not already in process of being removed, rather than increased.

The apparently narrow influence of the prosperity of particular places over the marriage rates of the surrounding districts is also worthy of attention, and is well attested by the moderate ratios in those parts of the division which, as already observed, do not share in its general activity and prosperity.

That the mere ratio of births to population has but slight connexion with the magnitude of the natural increase by births over deaths becomes

evident, on consideration of the fact that the region with the lowest birth rate showed, in 1841-50, the largest natural increase, and *vice versa*.

The death rates exhibit, as might be expected in so variously composed a population, an extreme diversity at different places, and in the sexes; and this appears to be traceable in a great measure to occupations, and to the modes of life they induce.

Finally, in taking leave of a subject which has cost us no small amount of dry labour, cheerfully given in the hope to rescue from neglect the great lessons embodied in the census, and, we trust, to induce, among the members of our Historic Society a more elevated idea of the aims of statistical science than the public at large have formed, it may also be deemed right to say what shares we have respectively had in the performance of the work. And this the more so as the greater part of it has been planned and executed by a gentleman resident in London, and personally known to very few of our number.

The original idea may be considered to belong about equally to each of us. The particular method of arrangement here adopted was tried and brought to a successful issue by Mr. Welton, before he saw a passage in Mr. Danson's Paper of March, 1855, "Science in Lancashire and "Cheshire," in which a similar elaboration of the Census returns, for the north-western division in particular, was recommended. About the time of the appearance of that paper, his own work was actually begun by Mr. Welton. The whole of the tables, now published, were then, and afterwards, designed and computed by that gentleman. After much mutual interchange of ideas, the first paper was written by Mr. Danson. The second was also written by that gentleman, aided by notes supplied by Mr. Welton. The third paper, and the present one, were written by Mr. Welton and afterwards remodelled and enlarged by Mr. Danson. So much as a joint statement.

In conclusion Mr. Danson desires to add, in his own name, that by far the greater part of any merit attaching jointly to the producers of these papers ought to be awarded to the one least known to the audience before which they have been read.

TABLE XXIV.

Proportions of Adult Population engaged in some of the Principal Occupations, in 1851.

Registration Districts.	Per centage of Males aged 20 years and upwards who were							Per centage of Females aged 20 years & upwards who were		
	Farmer.	Agricultural Laborer, (out door.)	Coal Miner.	Cotton Manufacturer.	Silk Manufacturer.	Engine & Machine Maker	Laborer, branch undefined	Cotton Manufacturer.	Silk Manufacturer.	Domestic Servant
Ulverstone	11.0	11.3	1.2	1.5	—	0.1	3.4	2.1	—	10.9
Lancaster	10.1	10.4	0.3	3.7	2.1	0.2	6.3	6.3	1.0	16.3
Garstang	17.6	25.1	—	4.5	—	0.1	2.0	7.1	—	11.8
Fylde	10.5	19.0	—	3.5	—	0.4	2.9	3.9	—	14.6
Clitheroe	14.8	16.5	—	14.4	0.2	1.8	2.1	21.0	—	6.3
Northern Region	12.1	14.8	0.4	5.2	0.6	0.5	3.7	7.6	0.3	12.4
Burnley	4.9	4.5	5.7	34.7	—	1.2	4.0	32.0	—	8.2
Haslingden	4.5	2.7	2.3	29.1	0.1	2.0	6.1	23.7	0.1	7.8
Blackburn	3.6	1.9	2.8	41.9	0.8	0.4	6.5	34.9	0.5	9.5
Preston	4.5	4.9	0.1	30.6	0.1	0.9	5.7	28.5	—	6.7
Chorley	9.6	11.7	5.4	29.9	0.2	0.5	3.1	30.5	0.2	8.5
Wigan	3.6	6.4	25.6	15.0	0.9	1.3	4.1	18.1	1.2	4.5
Leigh	4.8	7.5	8.2	17.8	22.6	0.4	2.3	15.9	28.8	4.9
Bolton	2.6	3.9	9.3	28.2	1.6	2.0	3.6	20.9	2.6	6.3
Bury	2.5	4.2	3.1	30.5	0.7	2.0	4.9	26.6	0.5	4.9
Rochdale	3.5	2.5	5.0	18.7	0.3	3.7	4.4	19.8	0.1	6.8
Oldham	1.8	2.3	6.8	30.4	8.6	5.5	4.5	25.4	9.5	3.3
Manchester	0.4	1.0	0.4	16.0	2.4	3.4	7.4	13.9	3.6	9.1
Salford	0.2	1.5	1.1	10.1	1.5	3.4	3.9	9.5	3.3	10.2
Chorlton	0.5	1.6	0.1	9.1	0.7	5.9	5.3	9.5	0.7	11.3
Barton-upon-Irwell	3.8	10.8	10.4	15.0	4.2	1.2	5.6	13.2	7.1	9.0
Ashton-under-Lyne	1.6	2.1	4.6	36.8	1.4	1.9	6.0	32.8	2.1	4.5
Stockport	1.9	4.3	2.7	33.3	2.9	1.7	5.5	31.2	2.3	4.7
Macclesfield	6.0	6.3	3.9	3.5	29.1	0.6	5.5	3.2	25.8	5.9
Eastern Region	2.6	3.4	4.5	23.6	3.3	2.5	5.3	21.0	3.7	7.2
Ormskirk	13.8	22.1	1.0	0.5	3.3	0.2	3.8	0.4	3.1	7.6
Prescot	3.8	10.8	9.7	0.2	—	1.0	16.3	0.6	—	8.2
West Derby	1.1	3.9	0.1	0.5	—	1.1	9.1	0.1	—	16.0
Liverpool	0.2	0.8	0.1	0.3	—	0.7	11.5	0.3	—	13.2
Wirral	2.8	7.1	0.6	0.1	—	0.8	13.4	—	—	17.9
Western Region	1.9	4.5	1.1	0.3	0.2	0.8	11.1	0.2	0.2	13.7
Warrington	4.7	15.0	2.1	4.8	1.3	1.3	10.0	4.6	1.8	11.4
Runcorn	7.0	19.8	—	—	—	0.2	7.0	—	—	8.4
Altrincham	10.3	19.6	—	4.3	1.2	0.1	6.5	3.2	0.5	11.1
Congleton	7.0	12.5	4.0	1.9	10.9	0.4	8.2	2.6	14.0	6.7
Northwich	7.3	10.9	—	—	0.1	0.1	10.7	—	0.1	8.5
Nantwich	10.8	22.6	—	0.2	—	3.3	3.6	0.3	—	11.0
Great Boughton	5.7	16.2	1.6	0.2	0.1	0.5	6.9	0.1	—	13.5
Southern Region	7.6	16.8	1.1	1.5	1.7	0.9	7.4	1.3	2.0	10.6
North Western Division	3.4	5.6	3.2	15.1	2.3	1.8	8.7	13.7	2.6	9.3

TABLE XXV.

Civil Condition of Adult Population in 1851.

Registration Districts.	Per centage of Males aged 20 yrs. & upwards who were			Per centage of Females aged 20 years & upwards who were			Number of Adult Females to 100 Adult Males in similar condition.			
	Unmarried.	Married.	Widowed.	Unmarried.	Married.	Widowed.	Total living.	Unmarried.	Married.	Widowed.
Ulverstone	38.5	54.4	7.2	29.5	57.8	12.6	94.6	72.7	100.6	166.9
Lancaster	35.3	56.6	8.0	33.7	53.4	13.0	106.9	101.9	100.8	172.2
Garstang	37.7	54.0	8.3	30.7	58.8	10.5	91.7	74.6	100.0	115.9
Fylde	34.7	57.5	7.8	34.4	55.0	10.6	108.3	107.2	103.5	148.5
Clitheroe	36.3	54.6	9.1	33.7	55.0	11.3	98.5	91.3	99.3	122.7
Northern Region	36.5	55 5	8.0	32.5	55.6	11.9	100.8	89.9	100 9	150.3
Burnley	29.4	63.0	7.6	27.9	61.6	10.5	102.8	97.5	100.6	142.2
Haslingden	27.7	64.0	8 2	26.0	62.5	11.5	104 1	97.6	101.6	145.9
Blackburn	27.6	65.3	7.1	27.0	62 4	10.5	105.8	103.5	101.1	157.5
Preston	31.0	61.7	7.3	32.5	56.5	11.0	110.7	116.0	101.2	168.1
Chorley	34.7	57.7	7.7	32.5	57.4	10.1	99.9	93.7	99.4	131.4
Wigan	31.6	60.8	7.7	27.6	60.8	11.6	99.8	87.2	99.8	151 5
Leigh	31.6	59.5	8.9	31.8	57.5	10.7	103.7	104.4	100.3	124.3
Bolton	28.5	64.3	7.2	26.9	61.1	12.0	105.8	99.9	100.6	175.7
Bury	28.6	64.4	7.0	28.5	60 9	10.6	106.7	106.3	100.9	162.2
Rochdale	28.9	63.6	7.5	27.5	61.3	11.2	104.5	99.7	100.6	155.7
Oldham	26.7	66.0	7.3	25.1	64.0	10.9	103.7	97.5	100.5	154.8
Manchester	30.4	63.3	6.3	28.7	56.8	14.5	112.8	106.5	101.2	258.5
Salford	27.7	66.4	5.8	28.8	58.4	12.8	115.2	119.7	101.4	251.5
Chorlton	28.7	65.7	5.7	30.9	56.7	12.4	118.0	127.0	101.9	258 8
Barton-upon-Irwell	30.9	61.6	7.5	32.7	56.6	10.7	110.1	116.5	101.2	156.6
Ashton-under-Lyne	27.5	65.8	6.8	28.4	60.0	11.7	111.1	114.7	101.3	192.4
Stockport	24.7	67.7	7.6	28.0	59.3	12.7	116.5	139.4	102.0	194.3
Macclesfield	28.9	63.0	8.1	29 2	58.7	12.1	107.9	108.9	100.5	162.3
Eastern Region	28.9	64.0	7.0	28.7	59.3	12.0	109.0	108.0	101.0	186.1
Ormskirk	35 2	56.9	7 9	32.1	56.2	11.7	102 5	93.5	101.2	152.2
Prescot	32.3	61.6	6.2	25.1	63.1	11.8	95.8	74.5	98 2	184.2
West Derby	28.8	65.2	6.0	32.1	54 5	13.4	125 3	139.6	104.6	281.3
Liverpool	38.2	56 4	5.5	30.8	54.7	14.5	105.5	85.2	102.3	280.0
Wirral	32.2	65.3	4.6	32.9	55.9	11.2	116.1	118.8	102.6	283 5
Western Region	34.5	59.8	5.7	31.0	55 6	13.4	110.3	99.1	102.4	259.0
Warrington	32.6	60.0	7.4	28 2	59.0	12.8	102.2	88.3	100.4	177.9
Runcorn	33.6	59.9	6.5	23.5	64.2	12.3	95.3	66.7	102.1	181.7
Altrincham	35.0	57.1	7.9	33.3	54.7	12.0	103.6	98.5	99.3	157.3
Congleton	28.6	63.4	8.0	28 0	61.2	10.7	103.6	101.6	100.1	138.2
Northwich	29 2	63.0	7.8	24.5	64 4	11.1	100.5	84.4	102.8	142.6
Nantwich	30.0	62.4	7.5	27.1	61.7	11.3	99.7	89.8	98.4	149.0
Great Boughton	32.9	59 5	7.6	31.3	55.4	13.3	108.0	102.9	100.6	187.5
Southern Region	31 8	60.6	7.6	28 5	59.4	12.1	102.5	91.9	100.4	163.3
North Western Division	30.9	62.3	6.8	29.4	58.3	12.3	108.2	103.0	101.3	195.4
England and Wales	30.3	62 6	7.1	28.3	58.7	13.0	108.1	101.1	101.3	198.2

TABLE XXVI.

Ages.—Population of each Sex at the higher ages to every 100 Children under Ten years of age in 1851.

Registration Districts.	Males.					Females.					Total Population, all ages.
	10–25	25–40	40–55	55–65	65 and upw.	10–25	25–40	40–55	55–65	65 and upw.	
Ulverstone	58.7	41.2	25.5	11.2	9.5	53.0	37.4	24.0	11.5	11.9	383.9
Lancaster	59.6	41.8	28.4	11.8	10.1	60.9	43.0	29.2	13.2	12.0	410.0
Garstang	61.8	39.6	29.1	12.0	12.6	57.2	38.1	25.4	10.8	10.7	397.3
Fylde	58.1	37.0	26.6	11.0	9.6	57.1	41.4	27.5	10.8	10.5	389.6
Clitheroe	64.1	40.2	27.7	12.3	10.5	56.4	40.3	26.5	12.7	10.1	400.8
Northern Region	60.1	40.3	27.2	11.6	10.2	57.0	40.3	26.7	12.0	11.2	396.6
Burnley	57.4	40.5	23.5	8.7	5.8	57.8	41.2	24.2	9.0	6.3	374.4
Haslingden	62.5	40.9	25.0	9.0	5.9	63.2	44.1	25.1	9.1	6.0	390.8
Blackburn	59.9	38.9	22.9	8.3	5.9	61.1	41.2	24.3	8.5	6.1	377.1
Preston	63.5	41.9	25.9	9.7	6.9	67.9	46.5	28.3	10.1	7.3	408.0
Chorley	58.4	36.8	27.0	9.4	7.6	56.2	38.1	25.0	9.7	8.2	376.4
Wigan	58.5	38.4	23.5	8.5	6.2	55.3	38.1	23.4	8.9	7.0	367.8
Leigh	59.7	40.6	27.1	10.5	8.2	63.1	43.4	26.1	11.1	9.0	398.8
Bolton	59.1	39.8	24.9	8.8	5.9	61.0	41.9	25.8	9.4	6.9	383.5
Bury	61.0	42.6	25.8	9.1	5.9	64.1	45.5	26.1	9.8	7.0	396.9
Rochdale	64.7	44.6	26.9	9.9	6.3	66.0	47.0	26.9	10.4	6.9	409.6
Oldham	61.5	43.6	26.8	9.2	5.6	64.9	44.6	26.5	9.9	6.6	399.2
Manchester	65.2	48.8	31.1	8.9	5.0	71.3	54.6	33.0	10.3	6.6	434.8
Salford	61.3	46.4	28.3	7.6	4.1	67.1	51.9	31.3	9.1	6.2	413.3
Chorlton	59.6	49.2	26.7	6.9	3.7	67.7	56.7	29.8	8.9	5.3	414.5
Barton-upon-Irwell	63.4	41.1	27.6	10.4	7.0	68.8	46.5	28.1	10.5	8.1	411.5
Ashton-under-Lyne	64.9	44.6	26.9	8.7	5.2	70.1	50.1	29.4	9.6	5.8	415.3
Stockport	65.5	43.0	28.8	9.7	6.3	74.8	50.2	31.8	11.1	7.0	428.2
Macclesfield	64.9	44.3	30.8	11.0	7.7	68.4	49.3	30.3	12.4	8.0	427.1
Eastern Region	62.0	43.5	26.9	8.9	5.7	65.7	47.4	28.1	9.8	6.7	404.7
Ormskirk	58.9	36.9	23.6	9.0	7.9	57.4	37.7	23.8	10.0	8.6	373.8
Prescot	57.2	40.8	23.2	7.5	4.9	54.6	37.6	21.4	8.0	5.8	361.0
West Derby	51.4	42.7	24.5	6.5	3.8	62.2	52.6	27.1	8.7	5.8	385.3
Liverpool	66.5	57.8	34.2	8.1	3.9	71.1	59.1	32.6	9.3	5.8	448.4
Wirral	49.9	45.1	23.4	7.3	4.0	61.7	49.8	25.1	8.1	5.9	380.3
Western Region	58.7	48.6	28.2	7.6	4.3	64.6	52.2	28.3	8.9	6.0	407.4
Warrington	60.9	42.6	25.0	9.0	6.5	59.6	41.4	25.4	10.3	8.2	388.9
Runcorn	58.3	39.2	25.9	10.0	6.9	54.5	37.6	24.4	9.7	7.6	374.1
Altrincham	63.0	43.8	29.5	11.2	8.5	62.9	45.1	28.9	12.1	10.3	415.3
Congleton	59.0	40.4	26.5	11.0	9.1	65.0	41.2	26.2	10.9	8.8	398.1
Northwich	55.5	35.5	25.1	9.9	8.6	54.3	35.9	23.8	10.3	8.7	367.6
Nantwich	57.2	39.9	26.1	10.8	9.8	55.7	40.1	24.1	11.0	10.5	385.2
Great Boughton	62.5	42.6	27.9	10.9	9.3	62.5	44.1	29.1	12.5	12.1	413.5
Southern Region	59.7	40.7	26.6	10.4	8.5	59.4	41.1	26.2	11.1	9.7	393.4
N. Western Division	61.0	44.2	27.2	8.9	5.9	64.4	47.5	27.9	9.8	7.1	403.9
England and Wales	59.3	41.7	27.3	10.9	8.5	60.9	44.7	28.4	11.8	10.2	403.7

TABLE XXVII.

ESTIMATED POPULATION OF ENGLAND AND WALES, AND OF THE NORTH WESTERN DIVISION, AT THE BEGINNING OF EACH YEAR FROM 1839 TO 1858; AND RATIOS OF BIRTHS, DEATHS, AND MARRIAGES OCCURRING IN EACH YEAR, TO POPULATION AT ITS COMMENCEMENT.

Years.	England and Wales.					North Western Division.				
	Estimated Population on 1st Jan.	To 1000 persons living at beginning of year.				Estimated Population on 1st Jan.	To 1000 persons living at beginning of year.			
		Marriages.	Births.	Births, illegitimate.	Deaths.		Marriages.	Births.	Births, illegitimate.	Deaths.
1839	15,479,000	7.96	31.82		21.90	1,978,000	8.89	37.15		28.97
1840	15,660,000	7.83	32.08		22.97	2,015 000	8.60	36.79		30.19
1841	15,830,000	7.74	32.35		21.72	2,049,000	8.56	36.28		25.76
1842	16,025,000	7.41	32.31	2.17	21.81	2,091,000	7.84	35.92	3.20	25 62
1843	16,221,000	7.63	32.51		21.36	2,133,000	8.93	36.06		25.26
1844	16,429,000	8.05	32.92		21.73	2,177,000	9.61	37.62		24.21
1845	16,640,000	8.64	32.66		21.00	2,227,000	10.47	37.67		24.45
1846	16,861,000	8.64	33.96	2.29	23.15	2,277,000	9.93	39.17	3.11	30.48
1847	17,071,000	7.96	31.63	2.12	24.80	2,317,000	8.43	36 53	2 82	34.17
1848	17,214,000	8.03	32.71	2.13	23.23	2,343,000	8.90	36.08	2.76	27.34
1849	17,405,000	8.15	33.22	2.26	25.33	2,384,000	9.53	36.42	2.84	29.65
1850	17,569,000	8.69	33.78	2.29	21.00	2,421,000	10.43	37.55	2.85	24.41
1851	17,821,000	8.65	34.56	2.36	22.19	2,473,000	10.06	38.30	2.84	26.07
1852	18,069,000	8.79	34.53	2.35	22.53	2,524,000	10.29	37.91	2.72	28.18
1853	18,313,000	8.98	33.44	2.17	22.99	2,569,000	10.34	37.46	2.61	27.34
1854	18,531,000	8.62	34.23	2.20	23.63	2,616,000	9 92	38.01	2.58	26.38
1855	18,755,000	8.11	33.86	2.17	22.70	2,667,000	8.81	37.40	2.57	26.11
1856	18,991,000	8.39	34.62		20.56	2,718,000	9.19	37.18		24.00
1857	19,286,000	8.25	34.38		21.77	2,774,000	9.00	36.94		25.63
1858	19,556,000	7.99	33.53		23.01	2,826,000	8.56	35.22		26.33
Mean 1839–58	17,386,000	8.24	33.31		22.48	2,379,000	9.33	37.09		26.97

NOTE.—The actual increase of population both in England and Wales and in the North Western Division exceeded, in 1841-51, the excess of Births over Deaths. Allowing for the different periods of the year at which the two Censuses were taken, it was found that this excess over natural increase averaged in the two cases, respectively, 27,185 and 20,600 per annum. It has been assumed that these numbers, respectively, immigrated every year into England and Wales and the North-Western Division, in addition to the natural increase. The populations are brought up to January 1st in each year, by a proportional calculation; and do not include "Persons on board vessels."

TABLE XXVIII.

Numbers of Marriages in Remarkable Years.

Registration Districts.	Marriages.					
	1842	1845	1847	1850	1853	1855
Ulverston	145	201	176	232	212	226
Lancaster	218	238	253	296	310	282
Garstang	57	72	80	76	80	73
Fylde	92	147	161	158	156	124
Clitheroe	129	201	129	159	146	150
Northern Region	641	859	799	921	904	855
Burnley	396	625	416	628	564	515
Haslingden	241	359	339	411	533	558
Blackburn	567	847	631	999	1,051	891
Preston	608	881	633	1,035	1,015	988
Chorley	179	317	162	251	269	231
Wigan	475	694	608	775	708	761
Leigh	*103	*273	244	264	309	278
Bolton	626	1,017	798	1,142	1,156	945
Bury	467	764	555	763	772	746
Rochdale	572	690	610	899	893	788
Manchester, Salford, Chorlton, and Barton	4201	6,057	4,865	6,301	6,332	4,954
Oldham	883	1,208	950	598	643	594
Ashton-under-Lyne				855	1,140	1,009
Stockport	392	681	451	1,007	1,091	914
Macclesfield	399	568	429	630	629	497
Eastern Region	10,112	14,981	11,721	16,558	17,105	14,669
Ormskirk	153	224	235	210	275	274
Prescot	268	356	422	453	478	455
Liverpool, West Derby, and Wirral	3,652	5,191	4,683	5,185	5,701	5,306
Western Region	4,073	5,771	5,340	5,848	6,454	6,035
Warrington	*496	*490	274	371	469	387
Runcorn			166	241	215	194
Altrincham	124	163	136	151	197	201
Congleton	194	219	244	228	251	258
Northwich	167	160	166	193	190	151
Nantwich	167	245	238	231	†257	233
Great Boughton	414	433	439	497	†517	524
Southern Region	1,562	1,710	1,663	1,912	2,096	1,948
North Western Division	16,388	23,321	19,523	25,239	26,559	23,507

* Twenty marriages have been transferred by estimate from Warrington to Leigh for 1842 and 1845, as the townships of Golborne and Kenyon were then included in the former district.

† Both these districts have been somewhat diminished, in order to form the district of Whitchurch.

TABLE XXIX.

Registration Districts.	In the years 1841-50 inclusive.					Actual increase between Censuses 1841-51.		Actual compared with Natural Increase.			
				Excess of Births over Deaths.				Males.		Females.	
	Marriages.	Births.	Deaths.	Males.	Females.	Males.	Females.	Excess.	Deficiency.	Excess.	Deficiency.
Ulverstone	1844	9069	5019	2112	1938	2064	1631		48		307
Lancaster	2489	10840	7879	1576	1385	— 190	155		1766		1230
Garstang	740	3759	2106	899	754	— 189	— 123		1088		877
Fylde	1305	6702	3843	1453	1406	— 17	986		1470		420
Clitheroe	1544	6872	4265	1364	1243	— 233	— 416		1597		1659
Northern Region	7922	37242	23112	7404	6726	1435	2233		5969		4493
Burnley	5173	22043	13559	4409	4075	4901	4765	492		690	
Haslingden	3342	17265	10188	3529	3548	4406	4728	877		1180	
Blackburn	7583	32652	20881	5829	5942	7431	8219	1602		2277	
Preston	7757	30092	21827	4948	3917	9542	9745	4594		5828	
Chorley	2297	13891	8318	2967	2606	— 835	— 300		3802		2906
Wigan	6076	27366	19885	3710	3771	6273	5244	2563		1473	
Leigh *	1970	11021	7318	1880	1823	1950	2232	70		409	
Bolton	8671	43781	28434	7403	7944	7904	9279	501		1335	
Bury	6240	31621	20657	5673	5291	5384	5934		289	643	
Rochdale	7112	24848	16244	4394	4210	5798	6139	1404		1929	
Manchester, Salford, Chorlton & Barton	53714	155764	123738	17050	14976	49726	55606	32676		40630	
Oldham	11272	30436	20535	5133	4768	7101	7279	1968		2511	
Ashton-under-Lyne		41080	29131	6132	5817	8747	8847	2615		3030	
Stockport	6405	30424	22237	4398	3789	1647	2883		2751		906
Macclesfield	4954	20011	15491	2642	1878	3586	3706	944		1828	
Eastern Region	132566	532895	378443	80097	74355	123561	134306	43464		59951	
Ormskirk	2064	12604	7456	2719	2429	1636	1696		1083		733
Prescot	3536	18186	11541	3277	3368	6117	6218	2840		2850	
Liverpool, West Derby and Wirral	44926	153334	135313	9780	8241	56295	64380	46515		56139	
Western Region	50526	184124	154310	15776	14038	64048	72294	48272		58256	
Warrington and Runcorn *	5166	21519	14663	3406	3450	3302	2729		104		721
Altrincham	1399	10077	6780	1691	1606	1362	1662		329	56	
Congleton	2229	7739	6541	741	457	528	947		213	490	
Northwich	1727	10581	6357	2269	1955	1103	1082		1166		873
Nantwich	2173	11520	7591	2027	1902	2062	2083	35		181	
Great Boughton	4469	12567	12025	293	249	2505	1610	2212		1361	
Southern Region	17163	74003	53957	10427	9619	10862	10113	435		494	
North-Western Division	208177	828264	609822	113704	104738	199906	218946	86202		114208	

* Twenty marriages, forty-two male and thirty-eight female births, thirty male and twenty-five female deaths, in each year, 1841-5, are transferred by estimate from Warrington to Leigh, Golborne and Kenyon townships being in those years included in Warrington.

TABLE XXX.

Registration Districts.	Annual Average proportions in 1841–50. to 1000 Persons living. Marriages.	Births.	Deaths.	Actual Increase of Population.	Births to one Marriage.	Annual Average proportions in 1850–2. Births to one Marriage.	Births. To 100 women aged 20–45.	To 100 married women.	Marriages to 100 adult unmarried Males.	Per Cent. on Natural Increase 1841–51. Males. Nett Immigration.	Nett Emigration.	Females. Nett Immigration.	Nett Emigration.
Ulverstone	6.45	31.72	17.55	12.9	4.9	4.5	20.9	22.4	7.1		2.3		15.8
Lancaster	7.20	31.34	22.78	— .1	4.4	3.9	18.2	21.4	8.8		112.1		88.8
Garstang	5.76	29.25	16.39	—2.4	5.1	5.3	18.9	20.1	5.4		121.0		116.3
Fylde	6.09	31.28	17.94	4.5	5.1	4.8	18.4	21.8	7.7		101.2		29.9
Clitheroe	6.80	30.28	18.79	—2.9	4.4	4.6	19.4	22.2	7.2		117.1		133.5
Northern Region	6.59	31.00	19.24	3.1	4.7	4.5	19.2	21.7	7.5		80.6		66.8
Burnley	8.76	37.34	22.97	16.4	4.3	4.1	21.5	24.5	12.8	11.2		16.9	
Haslingden	7.29	37.65	22.22	19.9	5.2	4.2	19.9	22.6	12.7	24.6		33.3	
Blackburn	9.15	39.38	25.18	18.9	4.3	3.9	22.0	25.6	15.7	27.5		38.3	
Preston	8.97	35.34	25.13	22.2	4.0	3.4	19.2	23.8	11.0	92.8		148.8	
Chorley	6.00	30.50	21.74	—3.0	6.0	5.3	21.5	21.9	7.8		128.1		111.5
Wigan	8.46	38.12	27.70	16.0	4.5	4.5	24.4	27.5	11.8	60.1		30.1	
Leigh	6.43	30.97	23.88	13.6	5.6	4.5	20.8	24.2	10.7	3.7		22.4	
Bolton	8.17	41.20	26.79	16.2	5.0	4.2	22.6	25.8	14.0	6.8		16.8	
Bury	7.50	38.61	24.84	13.6	5.1	4.3	19.6	22.7	12.0		5.1	12.2	
Rochdale	10.69	37.34	24.41	17.9	3.5	3.2	19.5	22.3	15.7	32.0		45.8	
Oldham	5.93	38.24	25.80	18.1	6.1	5.9	21.2	23.3	9.7	38.3		52.7	
Ashton-under-Lyne		37.21	26.09	15.9		4.6	18.4	22.3	11.6	42.6		52.1	
Manchester							18.1	21.3					
Salford						5.1	18.3	22.9	16.8	191.6		271.3	
Cheriton	12.83	37.20	29.55	25.2	2.9		17.8	21.6					
Barton-on-Irwell						2.4	17.0	20.7	17.4				
Stockport	7.28	34.60	25.20	5.2	4.8	3.1	17.9	21.3	19.1		62.6		23.9
Macclesfield	8.30	33.53	25.06	12.2	4.0	3.6	17.1	20.3	12.3	55.7		97.3	
Eastern Region	9.29	37.34	26.51	18.1	4.0	3.7	19.6	23.5	54.3	54.3		80.6	
Ormskirk	5.63	34.40	20.15	9.1	6.1	5.6	21.1	24.7	7.2		39.8		39.2
Prescot	7.09	36.44	23.14	24.7	5.1	5.0	22.7	25.4	9.6	86.7		84.6	
West Derby							16.4	22.2					
Liverpool	11.13	37.07	33.51	29.9	3.4	3.2	15.6	21.5	12.1	475.6		681.2	
Wirral							16.2	21.6					
Western Region	10.30	37.55	31.47	27.8	3.6	3.1	16.8	22.3	11.5	506.0		415.0	
Warrington						5.0	21.8	25.1	11.8				
Runcorn	8.76	36.51	24.89	10.2	4.2	4.1	22.2	22.7	9.5		3.1		20.9
Altrincham	4.30	30.98	20.84	9.3	7.2	6.6	18.1	21.0	5.1		19.5	3.5	
Congleton	7.49	35.00	21.97	5.0	3.5	4.5	18.3	20.0	9.5		28.7	107.2	
Northwich	5.71	35.14	21.11	7.3	6.7	5.7	22.2	25.1	8.6		51.4		44.7
Nantwich	6.05	32.08	21.14	11.5	5.3	5.2	19.8	20.8	8.2	1.7		9.5	
Great Boughton	8.74	24.57	23.51	8.0	2.8	2.9	15.1	17.5	11.0	255.0		546.6	
Southern Region	7.20	31.04	22.65	8.8	4.3	4.4	19.2	21.2	9.3	4.2		5.1	
North Western Division	9.14	36.38	26.79	18.4	4.0	3.7	18.9	22.9	12.7	75.8		108.0	
England & Wales	8.02	32.48	22.11	11.6	4.0	3.9	18.2	20.4	10.5	6.4		23.3	

TABLE XXXI.

AVERAGE ANNUAL DEATH RATES PER CENT. IN THE YEARS 1850–1–2, FOR EACH SEX AT FIVE PERIODS OF LIFE.

REGISTRATION DISTRICTS.	Age 0–5 Years.		Age 5–10 Years.		Age 10–45 Years.		Age 45–65 Years.		Age 65 Years upwards.	
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
Ulverstone	4.78	3.82	.95	.94	.96	.93	2.03	1.97	8.59	9.00
Lancaster	6.69	5.69	1.26	1.57	1.11	1.11	2.42	2.52	10.33	8.27
Garstang	4.43	3.19	1.30	.99	.62	.78	1.71	1.44	7.20	7.51
Fylde	5.55	4.75	.86	1.00	.75	.85	1.84	1.86	9.09	7.73
Clitheroe	5.43	4.92	1.09	.74	.73	1.15	1.62	1.93	8.99	7.71
Northern Region	5.53	4.63	1.08	1.09	.88	.99	2.00	2.06	9.04	8.21
Burnley	10.24	8.66	1.31	1.15	.89	1.07	2.09	2.05	10.47	9.88
Haslingden	8.25	6.35	1.06	1.07	.85	.95	2.15	2.49	9.55	9.94
Blackburn	10.24	8.61	1.36	1.31	.93	1.13	2.60	2.34	8.89	9.69
Preston	10.55	9.06	1.23	1.10	.96	1.09	2.67	2.58	9.28	9.86
Chorley	7.22	6.16	1.59	1.09	1.06	1.11	2.13	2.16	9.51	8.92
Wigan	10.05	8.27	1.41	1.11	1.05	.98	2.33	2.24	9.69	8.99
Leigh	9.68	8.18	1.31	.96	.92	1.02	1.97	2.09	10.04	8.66
Bolton	11.39	9.19	1.59	1.47	.96	1.04	2.61	2.27	10.92	9.15
Bury	9.14	7.67	.93	.80	.84	1.02	2.37	2.17	9.69	9.56
Rochdale	9.36	7.99	1.15	.98	1.05	1.13	2.74	2.25	10.11	9.21
Oldham	10.28	8.59	.84	.99	.84	1.10	2.91	2.72	10.57	9.66
Manchester	13.26	11.41	1.29	1.12	1.16	1.09	3.85	3.39	11.59	10.46
Salford	11.39	9.18	1.05	.85	.91	.90	3.24	2.63	10.89	9.67
Chorlton	10.34	9.09	1.01	.91	.88	.88	2.90	2.75	10.16	8.93
Barton-upon-Irwell	7.41	6.36	1.04	.74	.95	.92	2.06	2.09	8.55	8.51
Ashton-under-Lyne	11.14	9.43	1.24	1.20	.97	1.09	2.76	2.61	10.85	10.94
Stockport	10.40	8.48	.74	.80	.88	1.03	2.70	2.64	10.83	10.17
Macclesfield	8.81	7.57	1.21	1.20	1.02	1.28	2.41	2.51	9.69	10.83
Eastern Region	10.53	8.87	1.19	1.07	.97	1.05	2.78	2.58	10.23	9.73
Ormskirk	5.54	5.16	.87	.89	.84	.91	2.25	2.10	8.96	7.35
Prescot	8.59	7.81	1.37	1.09	1.02	.97	2.63	2.39	10.39	9.78
West Derby	9.15	7.95	1.15	1.27	.89	.88	2.80	2.38	10.14	8.82
Liverpool	14.06	12.94	1.56	1.57	1.29	1.13	3.73	3.05	13.68	10.69
Wirral	6.57	5.89	.98	1.02	.78	.74	2.39	2.00	10.86	8.32
Western Region	10.58	9.58	1.31	1.32	1.08	.99	3.15	2.63	11.42	9.47
Warrington	8.67	7.54	.98	1.12	1.05	1.01	2.80	2.27	9.65	9.66
Runcorn	6.43	6.04	.90	.83	.92	.91	2.63	2.38	9.71	9.47
Altrincham	6.04	4.93	.94	.94	.87	.95	2.14	1.85	8.69	8.52
Congleton	6.70	5.96	1.17	1.26	.88	1.23	2.03	2.23	8.17	9.99
Northwich	7.89	7.50	1.41	1.10	.85	.99	1.88	1.88	8.29	8.75
Nantwich	6.12	5.27	.76	.95	.64	.81	1.86	1.69	8.32	8.47
Great Boughton	6.63	6.12	.81	.75	.88	.96	3.07	2.26	8.96	8.28
Southern Region	6.93	6.20	.98	.98	.87	.98	2.39	2.08	8.76	8.86
North Western Division	9.93	8.56	1.19	1.12	.98	1.03	2.77	2.51	10.10	9.44
England and Wales	7.18	6.18	.87	.85	.85	.89	2.26	1.98	9.22	8.67

ON A SYSTEMATICALLY ARRANGED BORDER FOR PLANTS.

By the Rev. H. H. Higgins, M.A.

(Read 15th December, 1859.)

The success which attended the efforts of my respected friend Mr. Ward, to extend the instruction and pleasure derived from the study and love of plants, suggested to me the advantage of having, in gardens of public resort, flower borders so arranged as to illustrate simply and agreeably the succession of orders and families in the natural system.

Botanic gardens are confined to a few of the principal towns in the kingdom. The expenses attending their formation and maintenance are so considerable that wealthy communities alone are able to possess them; and it seems probable that their number in England will never be greatly increased.

On the other hand few populous towns are without gardens of public resort attached to bath-rooms, pump-rooms, or charitable institutions; and at the present time numbers even of small towns are being provided, under the "Cemetery Act," with spaces of ground in which the public has an interest, and to which free access is granted.

From these considerations it became my object to shew that with very moderate space, with little outlay, and requiring the care only of a single cultivator, it was possible to exhibit to the public, and maintain in efficient order, an intelligible and an attractive grammar of Botany.

For this purpose I selected in my own garden a plot of ground, one hundred and eight feet in length, by twelve feet in breadth, divided by walks eighteen inches wide, into twenty beds each three and a half feet in

width. The beds, walks, and forty lines of stone edging about two inches in thickness, occupied the whole length of the border. A single bed, being twelve feet long by three and a half feet wide, allowed a space fourteen inches square to be given to each of thirty plants disposed in cross rows of three, ten such rows reaching from back to front.

It was determined to confine the series to flowering plants, to exclude trees, shrubs, plants exceeding five feet in height, and water plants, and to admit species requiring protection in winter, annuals, and plants of little interest or beauty, only very sparingly.

The next step was to fix upon a system of arrangement. Dr. Lindley's "Alliances" of flowering plants, fifty in number, forty of which are capable of being suitably illustrated in an open border, offered a tempting correspondence with the twenty beds to be occupied; but the plan of the "Vegetable Kingdom" appeared to be scarcely adapted for a popular grammar of Botany.

Mr. Bentham's "Handbook of the British Flora" presented many advantages; but to have confined the series to British plants would have interfered very materially with the attractive aspect of the border. This, however, was not requisite, even whilst following Mr. Bentham's plan; so with the assistance of De Candolle's "Prodromus" for exotic genera and species, and for the few suitable exotic orders, it was decided to arrange the border as nearly as possible in correspondence with the "Handbook of "the British Flora."

General arrangement of the Border.

BED.

No. 1. Ranunculaceæ. Berberideæ.
2. Papaveraceæ. Cruciferæ, &c.
3. Caryophyllaceæ. Linaceæ.
4. Malvaceæ. Geraniaceæ, &c.
5. Leguminosæ.
6. Rosaceæ.
7. Onagraceæ. Saxifragaceæ, &c.
8. Umbelliferæ, &c. || Rubiaceæ, &c.
9. Compositæ.
10. Compositæ.
11. Campanulaceæ.

12. Ericaceæ. Gentianaceæ, &c.
13. Boragineæ. Solanaceæ.
14. Scrophulariaceæ.
15. Labiatæ.
16. Plumbagineæ, &c. || Polygonaceæ, &c.
17. Iridiæ. Amaryllideæ. Hypoxidæ.
18. Hemerocallideæ. Asphodeleæ. Convallarieæ.
19. Liliaceæ.
20. Cyperaceæ. Gramineæ.

For the sake of keeping the arrangement distinct and obvious, entire beds were given to each of five of the principal orders, and two to the compositæ. With none of these was there any difficulty; thirty plants carefully selected from half or two-thirds as many genera, were found to illustrate fairly the hardy herbaceous perennials even in a large order. It was, however, necessary to make the internal arrangement of the bed correspond with the sub-divisions of the order. Thus in the Labiatæ to Salvia and Monarda was assigned a place at the head of the bed; below them came Mentha and Nepeta, and other genera, down to Teucrium and Ajuga at the foot of the bed.

In some instances several natural orders had to be represented in a single bed. The transverse rows of three answered very well for this purpose; two or three such rows were given to orders of moderate extent, as Violaceæ and Hypericineæ; one to Linaceæ, Cornaceæ, &c.; whilst single spaces sufficed for Frankeniaceæ and some others. The eighth and sixteenth beds were divided in the middle by a transverse walk, the upper portion of the eighth containing the concluding orders of the Calyciflores, the lower portion the orders of monopetalous plants preceding the Compositæ: the upper portion of the sixteenth bed terminating the monopetalous plants, the lower portion constituting the whole of the room that could be spared for the Monoclamydeæ.

These two transverse walks, though occupying valuable space, were found useful in inviting attention to the important groups at the termination of which they were made. For the same purpose it would be well to have a broader walk between the fourth and fifth beds, dividing the Thalamiflores from the Calyciflores; and between the sixteenth and seventeenth a walk of some material of a different colour, to denote the change from Dicotyledonous to Monocotyledonous plants.

Experience seems to point out, in all arrangements of natural objects for public exhibition, the expediency of having a classification not only accurate but obvious, and even conspicuous. In a lengthened series, to distinguish the commencement of a family or a genus by a label may be sufficient for the guidance of a student, but for the public it is better to mark the change in such a way as to invite attention, and even to provoke enquiry.

It is hardly necessary to refer to the importance of selecting for the border such plants as are striking in their appearance, or remarkable for beauty. Yet an enthusiastic botanist might probably conclude that the order and accuracy of his series would ensure attention. No chance, however, should be thrown away. A beautiful flower illustrates a genus as well as one less ornamental, and with far better chance of being observed. Persoon was won to the study of Mycology by the beauty of Peziza coccinea. If, then, the border be made attractive in appearance, as well as scientific in its arrangement, the former quality may often lead to the appreciation of the latter.

Too great a proportion of very familiar plants should be avoided. A set of British grasses, though equally beautiful, would not be noticed once in a hundred times in comparison with a series of foreign kinds, such as may readily be procured, and constitute, even to an ordinary observer, one of the most attractive and interesting beds in the whole border.

In order to look well the taller plants must be placed in the middle row of the bed, and, as far as may be compatible with the arrangement, the plants should decrease in height from the back to the front.

Each plant should be set exactly in the centre of the space allotted to it; for this purpose it was found useful to employ a frame of wood fourteen inches square, inside measurement, and four inches deep. With the aid of a rod, marked so as to divide it into ten fourteen-inch lengths, it was easy to set the frame upon the exact spot to be occupied, and the soil for the whole of the space within the frame was then prepared to the required depth for the reception of the plant.

For plants with rapidly spreading roots it was found convenient to use slates, not quite fourteen inches long by six broad: these were pressed into the ground until their upper edges were nearly on a level with the

soil, forming a quadrilateral, surrounding and very effectually confining the plant. The bed for grasses was divided in this way throughout.

The names of the natural orders were exhibited on pieces of plate glass, one foot long by three inches broad. These were obtained from the waste edges cut off in squaring large plates of glass, and may be purchased at about sixpence per square foot. The glass is ground on both sides, and is a highly ornamental and beautiful material. The slips of glass were made more opaque by being painted white at the back; the letters were put on in front with black paint mixed with varnish or turpentine instead of oil: a year's exposure has not injured their appearance. These labels, when used, were supported horizontally in a leaning position by two slight props of wood, iron being found to stain the glass.

A very useful implement, which may be termed a sun-board, is formed by two pieces of wood, each a foot square, placed and joined like two sides of a box. Set upon its edge, with the rectangle turned towards the South, it forms a sheltered corner in which slips or cuttings may be protected from the sun and wind, whilst left open to the air and rain; and they are thus neither drawn up nor weakened as when under a hand-glass. Set with the rectangle uppermost, the sun-board forms a kind of penthouse, under which the stocks of plants may be sheltered from the rough weather in winter.

An obvious consequence of so limited a space as fourteen inches square being given to each plant, is the necessity of affording to most of the taller flowers the means of support. Garden sticks tapering upward appear much lighter, and are stiffer in the ground than the ordinary kind. Iron rods as thick as a cedar pencil, with one end fixed in a short stout wooden pin, are also useful.

In commencing the formation of a systematically arranged border, the first question will naturally relate to the space it is desirable to occupy. If the series is to be confined to hardy perennials, it seems probable that accommodation for six hundred plants will be sufficient: these however, in double rows with walks between them will require a larger space than one hundred and eight feet by twelve. If triple rows are adopted and more than fourteen inches square given to each plant, the central row in each bed will be found inconvenient to manage without disturbing the side rows.

A sufficient number of plants may readily be obtained. I rarely had to purchase, yet within the first year my border was furnished with five hundred and ninety species, illustrating most of the principal, and many of the smaller genera of hardy perennials. For the greater part of them I am indebted to the kindness and liberality of the Curators of the Liverpool, Edinburgh, Dublin and York Botanic Gardens. The late Mr. Nuttall, of Rainhill, Mr. Leeds, of Manchester, Mr. Skirving, of Liverpool, Mr. Stubbs, of Frodsham, Mr. Holcroft, of Upholland, and Mr. Williams, of Ormskirk,* also kindly contributed many valuable plants.

In conclusion I may refer to some of the advantages likely to be derived from systematically arranged borders of plants in gardens of public resort.

The Study of Botany may be promoted.

In many schools receiving assistance from the Committee of Council on Education, and in nearly all the higher class of schools, more or less of botany is taught. But from books alone, even the theory of botany is seldom learned to any purpose, much less can the love of plants be encouraged. It is not indeed, contended that the border can be a substitute for the fields and lanes, and woods and hills: but in how few schools can time be spared for rambling beyond the barren pavement or the dusty road. Moreover, even a ramble amongst the wild flowers leaves something to be done in a visit to the border. It is better a child should love a primrose than know the names of all the natural orders; but why may not something of both be attained? Now a hundred natural orders in the pages of a book with their hard names and harder descriptions are a formidable difficulty; but let the natural arrangement be seen displayed from beginning to end in a border of living plants, and the difficulty vanishes. The vexatious distinctions of stamens hypogynous, epigynous, perigynous, or isomerous, are found after all to mean only what may be seen in this bed, or in that, or in the other, and thus a great step is gained in the removal of difficulties attending the commencement of the study.

Indeed for purposes of instruction, the border may have some advantage over even the Botanic Garden; for in a large collection of plants it is rare to find the whole series so arranged as to make the succession of the

* Lists of Plants at very moderate prices are published by Mr. Skirving, of Liverpool; Mr. Holcroft, of Upholland, Wigan; E. G. Henderson and Son, Wellington Road, St. John's Wood, London, &c., &c.

natural orders distinctly visible throughout. Linear succession does not, it is true, obtain in nature, but it is inevitable in lessons and in books; and so wondrous an assistance is the eye to the memory, that after a few visits to the border, the position of a plant in the vegetable system is almost as readily remembered as the place of a letter in the alphabet: it is, in fact, hard to forget the position of a family with its alliances, when it is once observed in living illustration on a systematically arranged border.

Private Gardens may be improved.

It is quite possible the number and variety of beautiful plants seen in the border, may suggest to many who have gardens of their own, a far better and more delightful use of them than is commonly made at present. Everywhere the same flowers are now cultivated without even the slightest regard to the size or situation of the garden. The noble contrasts of colour presented to the eye in the gardens of the Crystal Palace, are supposed to be suitable for imitation in a plot of ground a few feet square. I confess when I have seen a gardener doing a bit of Chevreul in Petunias, and Eschscholtzias, where he had barely room to turn his wheelbarrow, I have longed to see in his place the lady of the cottage cherishing a good old cabbage rose, or caressing some modest alpine on her bit of rock-work.

The present aim, it seems to me, is too much at effect, a term which implies that flowers are desired to decorate a garden, instead of a garden being delightful as the home of sweet flowers; hence the favourites are now of few species, but of very rich and showy colours, yet who ever really loved a Petunia or an Eschscholtzia? It is admitted that many more species of flowers were to be found in private gardens twenty or thirty years ago; yet rare plants were then valued, just as prize Pansies or Picotees are now, in proportion to the exclusiveness with which they were possessed by their cultivators. But it is our own fault if we have no higher kind of value for floral treasures now; in fact, at no former period has it been possible to enjoy a garden with anything like that intelligent acquaintance with the natural history of plants, which is now easily attainable. The literature of botany has made us familiar with particulars historical, poetical, geographical, economical, meteorological, physiological, some of which distinguish every flower, and add to its beauty an interest, a little corresponding with the charm investing a yet higher order of loveliness, when combined with an intellectual education. It must increase the

pleasure to be derived from the cultivation of an Androsace to know something of the scenery and varying altitude of the snow line. Camassia loses nothing of its great beauty seen in the character of the staff of life to thousands; and the pale pure glories of Oenothera taraxacifolia beam in the twilight best appreciated by the beholder whose imagination has wandered in the valleys of Peru, and dwelt upon scenes depicted by the historian of the Incas. To exchange such plants as these for Mr. A's Defiance, Mr. B's Delight, and Lady C's Incomparable, is a very questionable advantage.

Too little is known in this country of the capabilities of an open garden. Flower shows have made almost every one familiar with magnificent Heaths and Azaleas and Pelargoniums, &c., &c., plants which cannot be grown in perfection except by the professional cultivator or by the wealthy; whilst there are hundreds of species of perennials, beautiful and perfectly hardy, needing only to be seen to be desired; and, there can be no doubt, if a demand should arise for them, they would soon be generally cultivated for a supply.

A systematically arranged border may afford much encouragement to botanical amateurs.

The border in fact may, in comparison with the botanic garden be what a popular manual is to a scientific treatise: and let not this be thought an unworthy object, for after all it may be quite as effectually to promote the highest and most worthy aims of science, to afford to greater numbers the means of an intelligent acquaintance with the elements of botany, as to decide some knotty long-disputed point in botanical physiology. It seems certain that in any science popular knowledge will advance *pari passu* with the progress of the science itself; always of course at a respectful distance from the van, but never left entirely behind. This is as it ought to be. The explorations of the foremost men are not to be emulated by the multitude; but a more humble class of labourers soon follow and prepare at least a portion of the new territory for all who choose to settle in it. No doubt the discoverers have the best title to do the honours of their acquisitions, but few discoverers will thus far condescend; few very learned men will write popular works: yet, happily, a communicative spirit is greatly on the increase; *philosophers are no longer a sect;* men who devote themselves to the investigation of scientific truth, giving their labours and their lives to profound researches, can no longer be said to

be *absorbed* in their pursuit; together with a more just appreciation of nature has arisen a far more practical recognition of a truth, which may be expressed in words not wholly unlike those of the great INSTRUCTOR Himself, and as I think, in full accordance with His mind, that science was made for man, and not man for science.

The following table is copied from a page in the quarto catalogue of the border in my own garden: it would, however, be far more convenient to have the catalogue made in oblong folio.

BED No. 6.—ROSACEÆ.

N. America.		*Britain.*
1. Spiræa Lobata. Mur.	Spiræa Kamtschatica. Pal.	Spiræa filipendula. L. sp.
Britain.	*Alpine Europe.*	*Bithynia.*
2. Dryas octopetala. L. Sp.	Sieversia montana. Spr.	Geum coccineum. Smih.
N. America.	*Louisiana.*	*Hungary.*
3. Gillenia trifoliata. Mœnc.	Sieversia triflora. R. Br.	Waldestenia geoides. Wil.
N. America.	*N. America.*	*Nipaul.*
4. Dalibarda fragarioides. Mi.	Potentilla floribunda. Poi.	Fragaria Indica. H. K.
Britain.	*Britain.*	*Europe.*
5. Potentilla argentea. L.	Potentilla rupestris. L.	Potentilla alba. L.
Calabria.	*Piedmont.*	*Hybrid.*
6. Potentilla Calabra. Ten.	Potentilla pedata. Poir.	Potentilla Russelliana.
var. maxima. Britain.	*S. Europe.*	*Canada.*
7. Sibbaldia procumbens. L.	Potentilla recta. L.	Potentilla tridentata. Sol.
Hybrid.	*Nipaul.*	*From Edinb. Botanic Garden.*
8. Potentilla Tongii.	Potentilla insignis. Royle.	Potentilla dubia.
	New Zealand.	*Europe.*
9. Agrimonia, species?	Acæna Sanguisorbæ. Vahl.	Potentilla opaca. L.
Britain.	*Britain.*	*Caucasus.*
10. Rosa pimpinellifolia. L.	Alchemilla alpina. L.	Alchemilla sericea. Wil.

pleasure to be derived from the cultivation of an Androsace to know something of the scenery and varying altitude of the snow line. Camassia loses nothing of its great beauty seen in the character of the staff of life to thousands; and the pale pure glories of Oenothera taraxacifolia beam in the twilight best appreciated by the beholder whose imagination has wandered in the valleys of Peru, and dwelt upon scenes depicted by the historian of the Incas. To exchange such plants as these for Mr. A's Defiance, Mr. B's Delight, and Lady C's Incomparable, is a very questionable advantage.

Too little is known in this country of the capabilities of an open garden. Flower shows have made almost every one familiar with magnificent Heaths and Azaleas and Pelargoniums, &c., &c., plants which cannot be grown in perfection except by the professional cultivator or by the wealthy; whilst there are hundreds of species of perennials, beautiful and perfectly hardy, needing only to be seen to be desired; and, there can be no doubt, if a demand should arise for them, they would soon be generally cultivated for a supply.

A systematically arranged border may afford much encouragement to botanical amateurs.

The border in fact may, in comparison with the botanic garden be what a popular manual is to a scientific treatise: and let not this be thought an unworthy object, for after all it may be quite as effectually to promote the highest and most worthy aims of science, to afford to greater numbers the means of an intelligent acquaintance with the elements of botany, as to decide some knotty long-disputed point in botanical physiology. It seems certain that in any science popular knowledge will advance *pari passu* with the progress of the science itself; always of course at a respectful distance from the van, but never left entirely behind. This is as it ought to be. The explorations of the foremost men are not to be emulated by the multitude; but a more humble class of labourers soon follow and prepare at least a portion of the new territory for all who choose to settle in it. No doubt the discoverers have the best title to do the honours of their acquisitions, but few discoverers will thus far condescend; few very learned men will write popular works: yet, happily, a communicative spirit is greatly on the increase; *philosophers are no longer a sect;* men who devote themselves to the investigation of scientific truth, giving their labours and their lives to profound researches, can no longer be said to

ON THE POPULAR CUSTOMS AND SUPERSTITIONS OF LANCASHIRE.

By T. T. Wilkinson, F.R.A.S., &c.

(Read 5th January, 1860.)

Part II.

Whether monotheism or polytheism is the more ancient form of belief is a proposition which has not yet received a satisfactory solution. Able advocates have ranged themselves on both sides; but the acknowledged want of an actual proof still leaves the question undecided. Independently of revelation, no people or tribe, respecting whom we possess authentic accounts, has ever presented us with the example of a belief in *one* all-powerful and undivided Being. The most uncivilised tribes of Africa, America or Australia, appear to have made several steps beyond this simple form, and hence the difficulties which present themselves at the very outset of the enquiry. *Practically*, the question may not admit of a definite solution, since we should require the most intimate knowledge of the least civilized race as a fundamental datum; but, *theoretically*, we may arrive at a position from which we shall not easily be removed. The *simple* must of necessity precede the *complex*, and consequently the idea of *one* supernatural Being must be anterior in point of time to that of *two* or more. Under this view, the good and the evil would form the second stage of development—a necessary consequence of increased observation—and, accordingly, we find the Great Spirit and his Adversary among the prevailing notions of some of the least civilised communities.

A gradual progression from one to many appears to have been the natural process by which all known mythologies have been formed. The tendency of observation to multiply causes, real or ideal; and to personify ideas; may be ranked as one of the tendencies of unassisted human nature; and the operation of this natural force must have been equally efficient at all times and in all countries. In the early stages of social improvement,

man would be very forcibly affected by natural phenomena. The regular succession of day and night—the order of the seasons—the heat of summer—the cold of winter—storms and tempests on sea and land—the sensations of pleasure and pain, hope and fear—would each impress him with ideas of effects for which he could assign no adequate causes; but having become susceptible of supernatural influences, the addition of imaginary beings to his mythology would keep pace with his experience, until every portion of the heavens, the earth and the sea, was peopled with, and presided over, by its respective deity or demi-god.

Thus it was that the rolling thunder and the "lightning's vivid flash" suggested the idea of a Jupiter grasping his destructive bolts, or of a Thor wielding his ponderous hammer. The "raging tempest" and the "boiling "surge" gave birth to a Neptune or a Njörd, each endowed with attributes suited to the aspects of the locality where the observations were made, and specially adapted to the intellectual condition of the community which first deified the conception. The all-powerful monarchs of the north may perhaps contrast unfavourably with their compeers of the south; but each supplied an adequate cause for an observed effect—each being sufficiently powerful to wield the elements at will, and thereby manifest his displeasure both to gods and men.

As society progressed in civilization, so did the study of philosophy and religion. The poets and the priests, however, did not entrust their speculations to the judgment of the people; they were too sensible of the power which secrecy conferred upon their occult pursuits, and hence they allegorised their conceptions of supernatural agencies, and also their ideas of the ordinary operations of nature and art. They founded systems of Cosmogony, Theogony &c., which were clothed in terms only to be fully understood by the initiated. The elements were spoken of as persons, and the changes which these underwent were regarded as the actions of individuals; and these in the lapse of ages, by losing their esoteric meaning, came to be considered as realities, and so passed into the popular belief. This is eminently the case with the northern mythology, respecting which we are at present more particularly concerned; for by far the greater portion of these highly poetical, though rugged myths, admit of a very plausible and rational explanation, on astronomical and physical principles.* Whether

* See Thorpe's *Northern Mythology*, vol. i., pp. 118—231.

this was equally the case with the Greek and Roman mythologies is now, perhaps, more difficult to determine. We only know them after their elaboration into almost perfect systems by intelligent communities, and when many of the most striking traces of their adaptation to natural and local phenomena had been eliminated by the ingenuity of their poets and their priests. Enough, however, remains in the etymology of the names to prove that both these and the northern systems had much in common. The fundamental conceptions of each possess the same leading characteristics; and both are probably due to the conquering tribes who migrated into Europe from the fertile plains of central Asia.*

During these early ages, war was considered to be the most honourable occupation. Valour constituted the highest virtue; and in the absence of all written records, tradition, in course of time, would add considerably to the prowess of any daring chieftain. A mighty conqueror would be considered by his followers as something more than human. The fear of his enemies would clothe him with attributes peculiar to their conceptions of inferior deities; and this, together with the almost universal "longing "after immortality" which seems to pervade society in all its stages, sufficiently accounts for the origin of the heroes and heroines—the demigods and goddesses of every mythology. Hence Hercules—the younger Odin—and a numerous train of minor worthies to whom divine honours were decreed in the rituals of Italy and the north.

On the introduction of Christianity, a powerful reactionary force was introduced into the popular belief, and many of its grosser portions were speedily eliminated. The whole of the mythological creations were divided into two distinct classes, according to the attributes for which they were more particularly distinguished. Those whose tendencies inclined towards the benefit of mankind were translated to heavenly mansions, with God as supreme; whilst the wickedly disposed were consigned to the infernal regions, under the dominion of the Devil. The festivals of the gods were transformed into christian seasons for rejoicing, their temples became churches, and the names of Christ, his apostles, the Virgin Mary, and the saints, took the places of those of Jupiter, Mercury, Thor, Frega, and Woden. All the inferior deities that presided over the woods, the mountains, the seas and the rivers, were degraded into demons, and were classed

* See Mallet's *Northern Antiquities;* also, Keightley's *Mythology of Greece and Rome.*

amongst those fallen spirits who are employed by the evil one to harass and deceive mankind. Our early missionaries, however, had studied human nature too well to attempt too violent a change. They contented themselves, for the most part, with diverting the current of thought into different channels; they gave *new* names to *old* conceptions, and then left their more rational and more powerful faith to produce its known effects upon the superstitions of the masses. But the habits and opinions of a people, who have long been under the influence of any mythological system, have become too deeply rooted to admit of easy eradication; and hence, in our own country, as in others, the transition from heathenism to christianity was effected by almost imperceptible steps. In spite of church establishments and comparatively intelligent instructors, the old belief continued to influence the minds of many generations; and although we have now been accustomed to the sway of a most rigid christianity for many centuries, we are still able to detect some interesting specimens of fossilized heathenism in the undisturbed nooks and corners of our own county. A glance at our history will suffice to remind us that we have been subjected to the influences of both the Romans and the Northmen; but since the rule of the latter has predominated, we shall not be surprised to find that some of the most interesting remains are either Scandinavian or German. They may have been somewhat modified by the contact of our early settlers with the Roman legions previously to their irruptions into Britain; but the main features of the sprites and demons which are said to occupy our hills, guard our rivers or haunt our houses, induce us to look to the Northmen for their introduction.

There are, however, many points of resemblance between the early Scandinavian and the Roman mythologies. Both had probably a common origin, but each became modified by increased civilization and the character of the localities occupied by each succeeding wave of a migratory population. "Every country in Europe," says the learned editor of Warton's *History of Poetry*, "has invested its popular belief with the same common marvels: "all acknowledge the agency of the lifeless productions of nature; the "intervention of the same supernatural machinery; the existence of elves, "fairies, dwarfs, giants, witches, wizards and enchanters; the use of "spells, charms and amulets." The explosions and rumbling sounds occasionally heard in the interior of Etna and Stromboli were attributed, in ancient times, to the rage of Typhon, or the labours of Vulcan: at this

day, the popular belief connects them with the suffering souls of men in the infernal regions. "The marks which natural causes have impressed "upon the unyielding granite were produced, according to the common "creed, by the powerful hero, the saint or the god, and large masses of "stone, resembling domestic implements in form, were the toys or the tools "of the demi-gods and giants of old. The repetition of the voice among "the hills of Scandinavia is ascribed by the vulgar to the dwarfs mocking "the human speaker; in England the fairies are said to perform the same "exploits; while the more elegant fancy of Greece gave birth to Echo, a "nymph who pined for love, and who still fondly repeats the accents that "she hears. The magic scenery occasionally presented on the waters of "the Straits of Messina is ascribed by popular opinion to the power of the "Fata Morgana; the gossamer threads which float through the haze of an "autumnal morning are [in our own county] supposed to be woven by the "ingenious dwarfs; the verdant circlets in the dewy mead are traced "beneath the light steps of the dancing elves; and St. Cuthbert is said to "forge and fashion the beads that bear his name, and lie scattered along "the shores of Lindisfarne."* If we draw our parallels a little closer, we shall find, as Mr. Roby well observes, that "the Nereids of antiquity are "evidently the same with the Mermaids of the British and northern shores:— "the inhabitants of both are placed in crystal caves, or coral palaces, beneath "the waters of the ocean; they are alike distinguished for their partialities "to the human race, and their prophetic powers in disclosing the events of "futurity. The Naiades differ only in name from the Nixens of Germany, "the Nisses of Scandinavia, or the Water-elves of the British Isles. The "Brownies are of the same kindred as the Lares of Latium, [and these "agree exactly with the Portuni mentioned by Gervase of Tilbury in his "*Otia Imperialis.*] The English Puck, [the Lancashire Boggart,] the "Scotch Bogle, the French Goblin, the Gobelinus of the Middle Ages, and "the German Kobold, are probably only varied names for the Grecian "Khobalus,—whose sole delight consisted in perplexing the human race, "and evoking those harmless terrors that constantly hover round the minds "of the timid. So, also, the German Spuck, and the Danish Spogel, "correspond to the more northern Spog; whilst the German Hudkin, and "the Icelandic Puki, exactly answer to the character of the English Robin

* Keightley's *Fairy Mythology*, pp. 2—3.

"Goodfellow."* Our modern devil, with his horns and hoof, is derived from the Celtic Ourisk and the Roman Pan.

Some of our elves and satyrs are arrayed in the costumes of Greece and Rome; and the Fairy Queen, with her attendants, have at times too many points of resemblance to escape being identified as Diana and her nymphs. The Roman Jupiter, by an easy transformation, becomes identical with the Scandinavian Thor—the thunder-bolt and chariot of the former corresponding to the hammer and wagon of the latter. Odin takes the place of Mercury. Loki is the same as Lucifer, for like him he was expelled from heaven for disobedience and rebellion. Hother encountered Thor, as Diomede did Mars. "The Grendels of the north answer to the "Titans of the south; they were the gods of nature to our forefathers—"the spirits of the wood and wave." Jupiter's eagle, the war-sign of the Romans, is similar in character to Odin's raven amongst the Danes; both nations considered that if the bird appeared to flutter its wings on the banners, conquest was certain; but if they hung helplessly down, defeat would surely follow. Warcock hill, on the borders of Lancashire and Yorkshire, has probably derived its name from the unfurling of this terrible ensign during the conflicts between the Saxons and the Danes for the possession of Northumbria;—the local nomenclature of the district attests the presence of colonists from both nations, and extensive traces of their fortifications still remain as evidence that our slopes and hill-tops formed at once the battle-fields and the strongholds of the country.

Among the more prominent of the demon superstitions prevalent in Lancashire, we may first instance that of the Spectre Huntsman, which occupies so conspicuous a place in the folk-lore of Germany and the north. This superstition is still extant in the gorge of Cliviger, where he is believed to hunt a milk-white doe round the Eagle's Crag in the vale of Todmorden on All-Hallow's Eve. His *hounds* are said to fly yelping through the air on many other occasions, and under the local name of "*Gabriel Ratchets*," are supposed to predict death or misfortune to all who hear the sounds.† The Lubbar Fiend still stretches his hairy length across the hearth-stones of the farm houses in the same district, and the feats of the Goblin Builders form a portion of the popular literature of almost every locality. They are

* *Traditions of Lancashire*, p. xiv.

† See Roby's *Traditions of Lancashire*, and Hamerton's *Isles of Loch Awe*; also, *Choice Notes, Folk-lore*, pp. 247-8.

said to have removed the foundations of Rochdale church from the banks of the river Roach up to their present elevated position. Samlesbury church, near Preston, possesses a similar tradition. The demon pig not only determined the site of St. Oswald's church at Winwick, but gave a name to the parish. The parochial church at Burnley, it is said, was originally intended to be built on the site occupied by the old Saxon Cross in Godly Lane; but however much the masons might have built during the day, both the stones and the scaffolding were invariably found where the church now stands, on their coming to work next morning. The local legend states that on this occasion also the goblins took the form of *pigs*, and a rude sculpture of such an animal, on the south side of the steeple, lends its aid to perpetuate and confirm the story.

But the labouring goblins do not always confine themselves to the removal of churches to more eligible situations; for they are by turns both useful and troublesome to the farmers of the district where they choose to reside. One example, out of many, may suffice for illustration. Syke Lumb farm, near Blackburn, is reputed to be still visited by one of these anomalous beings, and many of his mad pranks still pass current in that neighbourhood. When in a good humour, this noted goblin will milk the cows, pull the hay, fodder the cattle, harness the horses, load the carts and stack the crops. When irritated by the utterance of some unguarded expression or mark of disrespect, either from the farmer or his servants, the cream mugs are then smashed to atoms; no butter can be obtained by churning; the horses and other cattle are turned loose, or driven into the woods; two cows will sometimes be found fastened in the same stall; no hay can be pulled from the mow; and all the while the wicked imp sits grinning with delight upon one of the cross beams in the barn. At other times, the horses are unable to draw the empty carts across the farm-yard; if loaded they are upset; whilst the cattle tremble with fear, without any visible cause. Nor do the inmates of the house experience any better or gentler usage. During the night the clothes are said to be violently torn from off the beds of the offending parties, whilst by invisible hands they themselves are dragged down the stone stairs by the legs, one step at a time, after a more uncomfortable manner than we need describe. Hothersall Hall, near Ribchester, was formerly the scene of similar exploits; but the goblin is understood to have been "*laid*" under the roots of a large laurel tree at the end of the house, and will not be able to molest the family so

long as that tree exists. It is a common opinion in that part of the county that the roots have to be moistened with milk on certain occasions, in order to prolong its existence, and also to preserve the power of the spell under which the goblin is laid.

None but the Roman Catholic priesthood are supposed to have the power of "laying an evil spirit," and hence they have always the honour to be cited in our local legends. Sometimes, too, as in Norway and Sweden, they have the credit of outwitting the goblins; and many an old farm residence has the reputation of having been freed from their presence until they can spin a rope from the sands of the Ribble. The mansion at Towneley does not escape the imputation of having its Boggart, although its visits are now limited to once in seven years, when its thirst for vengeance has to be satisfied by the untimely death of one of the residents at the Hall. There appears to be more than the usual show of reason for the presence of this goblin. Sir John Towneley is supposed to have injured the poor of the district, nearly four hundred years ago, by "laying "in" a considerable portion of common to his park, and as a punishment for this offence, his soul is said to haunt the scenes of his oppression. The peasantry still aver "that the old knight's spirit, being unable to rest, "wanders about the mansion, and may be heard over the very parts taken "in, crying in most piteous tones—

> "Be warned! lay out! Be warned! lay out!
> Around Hore-law and Hollin-hey clough.
> To her children give back the widow's cot,
> For you and your's there is still enough."*

The popular story of "the boggart flitting" is common to both Lancashire and Yorkshire. Under exactly similar forms it may be met with in other counties, and it is in fact the common property of all the nations in the north of Europe. Keightley gives the tradition, in his *Fairy Mythology*, as prevalent in Denmark; and Thorpe adduces several instances of its occurrence in the folk-lore of Germany and Scandinavia.

The power of the Devil, his personal appearance and the possibility of bartering the soul for temporary gain, must still be numbered among the articles of our popular faith. Repeating the Lord's Prayer backwards is said to be the most effectual plan for causing him to rise from beneath; but when the terms of the bargain are not satisfactory, his exit can only be

* Pictorial *History of Lancashire*, p. 189; Whitaker's *History of Whalley*, p. 342.

secured by making the sign of the cross and calling on the name of Christ. In the neighbourhood of Blackburn, a story prevails to the effect that two thrashers once succeeded in raising him through the barn floor; but on their becoming alarmed at their success, he was summarily dismissed by means of a vigorous thrashing on the head with their flails. His partiality for playing at cards has long been proverbial, both in this county and on the continent. A near relative of my own firmly believed that the devil once visited their company when they had prolonged their play into Sunday. How he joined them they never rightly knew, but, as in the Danish legend respecting a similar visit,* his presence was first suspected in consequence of his extraordinary "run of good luck;" and a casual detection of his *cloven foot* completed the dispersion of the players. It is not always, however, that he obtains the advantage; for he has more than once been outwitted by a crafty woman. In the Netherlandish versions, two thrifty matrons contrive to save their husbands' souls by taking advantage of weak points in one of the conditions of sale. The Danish legend gives the credit of contriving such a deliverance to a Jutland priest "who knew "something more than his pater-noster." In the Lancashire tradition we find the poor tailor of Chatburn stipulating for *three* wishes, and, on the advice of his wife, consulting the "holy father of Salley" in his extremity. When the fatal day arrived, he freed himself from the bond by expressing, as his last wish, that his tormentor "were riding back to his quarters on a "dun horse, never to plague him more." The devil, it is said, gave a yell which was heard to Colne, on finding that he had lost his man. Mr. Roby, in his *Traditions*, and the author of the *Pictorial History of Lancashire*, give humorous engravings of this noted ride; and the sign of "The Dule "upo' Dun," over the door of the wayside inn, attests the popular belief in the local tradition. From these and many other instances which might be adduced, it is evident that we have derived many of these superstitions from the Saxon and Danish settlers in Northumbria. The essential parts of each are identical, and as regards these particular bargains, it may be added, as a curious circumstance, that in no case is the bond held to be binding unless it be signed with the blood of the persons contracting.

From a statement made by Mr. Crofton Croker, in the dedicatory letter to the Brothers Grimm, affixed to his *Fairy Legends of the South of*

* See Thorpe's *Northern Mythology*, vol. ii., p. 179—188.

Ireland, it might be inferred that the belief in Elves is well nigh extinct, and that in a very short time "no traces of English fairies will remain, "except those which exist in the works of Shakespere, Herrick, Drayton, "and Corbet." He, however, presently admits that he was somewhat surprised to receive an account of the appearance of an actual fairy within three miles of the metropolis. This circumstance appears to have led him to doubt his preceding statement; and very properly so; for had he been privileged to mix with the rural population of those districts where trade and manufactures have as yet scarcely penetrated, he would have found ample reasons for qualifying his previous assertions.* Traditions respecting the hill folks yet live amongst our rural peasantry. Antique tobacco pipes, formerly belonging to the fairies, are still occasionally found in the corners of newly-ploughed fields. They themselves still gambol on the grassy meads at "dewy eve;" and their revels are yet believed to be occasionally witnessed by some privileged inhabitant of our "calm se-"questered vales." It is generally stated that in order to be enabled to see one of these diminutive beings, the use of ointments, four-leaved clover or other specific preparations are necessary; but a near relative of my own, not more imbued with superstition than the majority, most firmly believed that he once saw a real dwarf, or fairy, without the use of any incantation. He had been amusing himself one summer evening on the top of Mellor Moor, near Blackburn, close to the remains of the Roman encampment, when his attention was arrested by the appearance of a dwarf-like man, attired in full hunting costume, with top-boots and spurs, a green jacket, red hairy cap, and a thick hunting whip in his hand. He ran briskly along the moor for a considerable distance, when leaping over a low stone wall, he darted down a steep declivity, and was soon lost to sight. The popular opinion of the neighbourhood is that an underground city exists at this place—that an earthquake swallowed up the encampment—and that on certain evenings in the year the hill folks may be heard ringing their bells and indulging in various festivities. Considerable quantities of stone, which still remain around the ditches of this rectangular speculum, may have suggested the ideas of a city and an earthquake; but the rest is only the common opinion of the north of Europe respecting Christian observances by the fairy population. On other occasions, they are supposed

* See Bamford's *Early Days*, for a very interesting picture of Lancashire country life; its sports, pastimes, and superstitions.

to exhibit themselves in military array on the mountain sides; their evolutions conforming in every respect to the movements of modern troops. Such appearances are believed to portend the approach of civil commotions, and are said to have been more than usually common about the time of the rebellion in 1745-6. This would suggest an explanation of a more rational character, but we have no desire to do such violence to an interesting local tradition, since the "Death of Walter Selby," one of Allan Cunningham's most beautiful *Traditionary Tales of the English and Scottish Peasantry*, owes its principal charms to Dame Eleanor's "account of the spectre "horsemen of Soutra Fell."

The Water Sprites believed in by our ancestors in the north of Europe, still form a portion of the folk-lore of Lancashire and Yorkshire. There is scarcely a stream of any magnitude to be found in either county which does not possess a presiding spirit in some part of its course. The stepping-stones at Brungerley, near Clitheroe, are said to be haunted by a malevolent sprite, who assumes almost as many shapes as Proteus of old. He is not known by any particular designation, nor are there any traditions to account for his first appearance; but at least *one* life in every *seven* years is required to appease the anger of the spirit of the Ribble at this place. We derive the familiar epithet "Old Nick" from the Norwegian Nök, the Norse Nikr, or the Swedish Neck;—and no further proof of their identity is required than a comparison between the attributes possessed in common by all these supernatural beings.

The Nök is said to require a human sacrifice once a-year; and some one is therefore annually missing in the vicinity of every pond or river where one has taken up its abode. The males are said to be very partial to young maidens, whom they seize and drag under the water; whilst those of the opposite sex are quite as attractive and dangerous to the young fishermen who frequent the rivers. The German Nixes possess the same attributes. Both sexes have large *green teeth;* and the male wears a *green* hat, which is frequently mistaken by his victims for a tuft of beautiful vegetation. He is said to kill without mercy whenever he drags a person down, and a fountain of blood which shoots up from the surface of the water announces the completion of the deed. A perfect identification of this with our own popular belief is now easy. Nothing is more common at present than for children who reside in the country to be

cautioned against venturing too near the water's brink, lest "Green Teeth" or "Bloody Bones" should pull them in. "Old Nick" is said to lurk under the shady willows which overhang the deep water; and the bubbles of gas which may be observed escaping from the bottoms of quiet pools, are attributed to the movements of the water sprites which lurk beneath. Our sailors have not yet been schooled out of their belief in Mermen and Mermaids. These semi-human inhabitants of the water have preserved their characteristic attributes through all changes of race, country and religious opinion. They everywhere possess their double nature—they ever float on the glassy stream or bask in the summer sun on the shores of our seas and lakes. Even the early colonists of America did not fail to carry with them the details of the same attractive superstitions, which they have transmitted to their posterity, who still cherish the supernatural as fondly as their relatives in the mother country. Our local literature possesses Roby's tradition of "The Mermaid of Martin Mere," which has given permanence to the popular notions respecting mermen and mermaids; and we find the same thing effected across the Atlantic by a more amusing, but not less significant, account of Jack Tar's adventures amongst these interesting inhabitants of the deep.

The Schrat, or Schretel, of the German nations, is identical with the more ancient Skrat of the Scandinavians. He is noted for making game of persons who are out late at night. Occasionally he places himself on a cart or other vehicle, which then becomes so heavy that the horses are unable to move the load. They begin to tremble and perspire, as if sensible of the presence of something diabolical, but after a short time "Old Scrat" slips off behind, and disappears with a malicious laugh. In Lancashire we are no strangers to Old Scrat and his doings. With many, the name is merely a synonym for that of the devil; but our country carters are able to mark the distinction, and have besides a goodly store of anecdotes respecting the heavy loads which their horses have sometimes been compelled to draw, when nothing could be seen except the empty cart. One of them assured me that on such occasions his horses reared and became almost frantic; their manes stood erect, and he himself could see the wicked imp actually dancing with delight between their ears. Another very respectable person affirms that not many years ago, as a funeral was proceeding to church, the coffin suddenly became so heavy that it could not be carried. On this being made known to a clergyman who was pre-

sent, he offered up a short prayer, and commanded "Old Scrat" to take his own. This was no sooner done, than the excessive weight was felt no more, and the corpse was carried forward to the place of interment. Similar superstitions prevail in the more northern countries, with but slight variations; and hence sufficiently indicate their common origin.

The Barguest, or Barnghaist, of the Teutons, is also reported to be a frequent visitor in Lancashire. The appearance of this sprite is considered as a certain death-sign, and has obtained the local names of "Trash" and "Skriker." He generally appears to one of the family from which death is about to select his victim, and is more or less visible according to the distance of the event. I have met with persons to whom the barguest has assumed the form of a white cow or a horse; but on most occasions "Trash" is described as having the appearance of a large dog, with very broad feet, shaggy hair, drooping ears, and eyes "as large as saucers." When walking, his feet make a loud splashing noise, like old shoes in a miry road, and hence the name of Trash. The appellation Skriker has reference to the screams uttered by the sprite, which are frequently heard when the animal is invisible. When followed by any individual, he begins to walk backwards, with his eyes fixed full on his pursuer, and vanishes on the slightest momentary inattention. Occasionally he plunges into a pool of water, and at other times he sinks at the feet of the person to whom he appears with a loud splashing noise, as if a heavy stone were thrown into the miry road. Some are reported to have attempted to strike him with any weapon they had at hand, but there was no substance present to receive the blows, although the skriker kept his ground. He is said to frequent the neighbourhood of Burnley at present, and is mostly seen in Godly Lane and about the Parochial Church; but he by no means confines his visits to the churchyard, as similar sprites are said to do in other parts of England and Wales.

I here terminate the second portion of my essay; not because my materials are exhausted, but simply because I must have regard to the pages of your Transactions. On another occasion I hope to lay before you the miscellaneous customs and superstitions of our county, which I apprehend will be found no less curious and interesting than the preceding.

Postscript.

[Throughout the whole of these papers it is to be understood that there exists a corresponding Lancashire opinion, or ceremony, for every instance here adduced, whether expressed or implied. To give illustrations of all these, at length, would require a volume, not an essay. I may also state, that in comparing our Lancashire superstitions with those of other nations my object is two-fold:—firstly, to note their existence here; and secondly, to indicate the probable source whence they may have been derived. Several general deductions, which have cost me much labour, are, I find, almost identical with conclusions arrived at by Dr. Dasent in the *Introduction* to his *Popular Tales from the Norse;* but I had not the opportunity of seeing that interesting work until Whitsuntide 1860, more than six months after this paper was wholly written.]

THE CHIMERAS: AN ATTEMPT TO SHOW THAT THE COMPOUND ANIMALS OF THE ASSYRIAN MARBLES ARE REPRESENTATIONS OF THOSE ERECTED BY SOLOMON AND JEROBOAM.

By Lieut.-Gen. the Hon. Sir E. Cust, D.C.L., President.

(Read 1st and 8th December, 1859.)

By the word *chimera* is understood a mere creature of the imagination, composed of such contradictions and absurdities as cannot possibly exist anywhere but in thought.*

In mythology it was a fabulous monster, as old as Homer and Hesiod, which had the composition of lion, goat and dragon, and breathed a fire fierce, menacing and unextinguishable. Bellerophon was commanded to destroy this monster, and with the assistance of the flying horse, Pegasus, he slew the chimera. But the fable was supposed to have had a foundation, which was this—that there was a burning mountain of the name in Lysia, the top of which, being desert, was the abode of lions; the middle, having good pastures, was inhabited by goats; and the marshy ground below abounded with serpents. As Bellerophon was the first who caused this mountain to be inhabited, it was feigned that he slew the chimera.

Dr. Johnson calls chimera "a vain and wild fancy, remote from reality."

Let us now quit the fabulous history of the creature Chimera, to enquire into the "vain and wild fancies, remote from reality," which have arisen as "creatures of the imagination," and notwithstanding their "contradictions and absurdities" have amused the credulity of mankind in all ages. The following are the best known chimeras, personified by various combinations of man, beast, bird and reptile:—

First, we must name Cherub, Cherubim and Seraphim and the Evil Angel.

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* Encyclopædia Britannica, *in loco.*

Second, the Sphinxes, Andro-Sphinxes and Griffins.

Third, the Centaurs, Minotaurs and Hydra.

Fourth, the Griffins, Dragons, Harpies and other heraldic inventions.

Fifth, the Fauns and Satyrs, Sirens, Tritons and Mermaids.

The first notice we receive of a "fancy remote from reality" is derived from the Bible. The Almighty commanded Moses, then setting up the tabernacle in the wilderness, to "make two cherubims of gold, of beaten "work, in the two ends of the mercy-seat. And make one cherub on the "one end, and the other cherub on the other end: even of the mercy-"seat shall ye make the cherubims on the two ends thereof. And the "cherubims shall stretch forth their wings on high, covering the mercy-"seat with their wings, and their faces shall look one to another; toward "the mercy-seat shall the faces of the cherubims be."* Here is express mention of a winged human-faced figure, of a form unknown to man—in fact, that of an angel. The nations who acknowledged one Almighty Creator, and repudiated with scorn a plurality of gods, were nevertheless willing to accept some objects of intermediate homage, whom they imagined to be placed between their humanity and the awful supremacy of an unseen God. The belief in such superior beings we find to be very ancient, and authorised by a variety of passages in scripture. The bodily forms assigned to them are various, none allowed to be actually impossible, but being "remote from reality," they were deemed to be merely allegorical. Still, the co-existence of orders of beings superior in nature to ourselves and never instigated by human passions, had been recognised in the messengers or agents of the mercy or wrath of the Almighty Creator. It has never been called in question by any religion, and has been as extensive as the belief of a God. Nevertheless, such beings constitute, according to the definition, a chimera.

Without pursuing our enquiry into the nature and order of these heavenly creatures, it is sufficient here to notice that the Divine command given to the lawgiver recognises and admits a chimera in the composition of cherubim and seraphim. The actual shape of these celestial creatures is no where given to us: the general opinion has been, that they were spiritual substances, that might at any time assume bodies, and

* Exodus xxv., 18, 19, 20.

appear in any shape they pleased. The Jewish doctors have always represented them as winged heads, but the scriptures have never described any particular form under which they have been therein related to have appeared to man. After the period of the captivity, the Jewish ideas concerning angels were modified by admixture with the Chaldaic belief on the same subject; but from the first we hear of an impersonated fallen angel, with the mission of making mischief and counteracting good. The Mosaic account described this fallen angel as a serpent, but subsequent representations of Satan were that of the dragon, soon changed to a more elevated character, the star-bright apostate, who drew after him the third part of heaven. After numberless representations of this terrible being, Raphael fixed the proportions of the demon as human, giving him a swarthy red colour, with horns, hoofs, a serpent tail, and wings like those of a bat. The original conception of a superior angel, however, always remained the same, that of a human face with wings; and the prophet Isaiah makes seraphim to have six wings, Ezekiel gave the cherubim four, and St. John described those he saw as having "six wings, full of eyes within."

The several descriptions, therefore, which the scripture gives of cherubim differ from one another. They are first named in the Bible as guarding Paradise, but without any description whatever of their form.* In the later writings they are described in the shapes of men, eagles, oxen, lions, and in a composition of all these together. It would appear that they were more commonly regarded as containing in their composition the parts of an ox; for which this reason has been given—that the word cherub has its root from a word in Arabic, Syriac and Chaldee, signifying "to plough;" from thence the inference seems to have been deduced that as the animal most usually employed in ploughing in all Eastern countries was the ox, therefore the cherub consisted of the ox and man united, and this interpretation has been strengthened by the fact, that the word which the prophet Ezekiel in one place calls the face of a *cherub*, he employs in another to mean the face of an ox. Grotius says, that cherubim were figures like a calf. Bochart thinks they were very nearly of the figure of an ox. The representations of cherubim have always erred in two extremes—some, considering them as very near humanity, have designed them as angelic men; others have imagined them as winged calves or oxen. Josephus

* Calmet.

says that cherubim were extraordinary creatures unknown to mankind, and that in his day no one could tell, or even conjecture, what was their shape.

Leaving thus in uncertainty the original form of cherubim, we next come to their representation at the construction of the temple. King Solomon made "within the oracle two cherubim of olive-wood, each ten "cubits high." These were altogether distinct from the Mosaic figures already mentioned, which were placed upon the ark of the covenant within the vail; they were small and of beaten gold, while Solomon's were of a greatly increased size, and were made of wood overlaid with gold. It is not stated that they were placed there by any Divine command, and therefore they may have been merely added for the greater ornamentation and glory of God's house, but nevertheless they were conspicuously manifest right and left of the holy of holies. It is perfectly understood from Grotius and others, that these two cherubim had the parts and properties of man, lion, ox and eagle, expressly to show the dispensations of Providence—by the lion, the severity of his justice; by the man, his goodness and mercy; by the ox the slowness of punishment (according to the Greek proverb, βοειν ποτὶ); by the eagle's wings, his ubiquity;—thus representing the activity, wisdom, boldness, patience and knowledge of the angel messengers through whom the world is governed.

The existence of these figures of a "fancy remote from reality" in Solomon's temple at Jerusalem must have been known to all the Jewish people, and must have been continually present to their sight in the temple worship. The God that "dwelled between the cherubims" was present to the eye of faith behind the vail, which was suspended between and behind these symbolical, chimerical colossi. That in their composition they were not offensive to the Almighty may be devoutly and reverently inferred from the position they were permitted to retain throughout the existence of the first temple, and from the visions of his Almighty presence which it subsequently pleased the Deity to convey to Ezekiel and St. John, under the form of these mystical creatures. But it is no part of our subject to follow the cherubim beyond the temple, into those sublime habitations where they have not been further made known to us; and we therefore proceed to consider other remarkable chimera.

Clement of Alexandria believes that the Egyptians imitated the cherubim of the Hebrews in the creation of their Sphinxes and other hieroglyphical

animals. It is very remarkable that no mention whatever of the sphinx should occur in scripture history; for when we consider how intimate was the relation between the Israelitish people and the Pharaohs, if sphinxes had at that period abounded in their palaces and temples, to the extent that the remains of them in that land would lead us to suppose, it is singular that neither the records of their history, nor the poetic language of their prophets, should (however incidentally) have alluded to this remarkable chimera. The literati are not agreed as to the antiquity of the sphinx, or as to the country in which it was first known. In the "Asiatic Researches" a claim is set up for its early existence in Judea, where it is called "Feugh." Hesiod says—

> "From Orthos and Chimera's foul embrace
> Is Sphinx derived—a monster, to the race
> Of Cadmus fatal."

Orthos was a dog belonging to Geryon; and therefore Sphinx originally had the body of a dog, but it had the claws and tail of a lion, with the human head and the wings of a bird. In heathen mythology she is said to have been sent into the neighbourhood of Thebes by Juno, who wished to punish the family of Cadmus. She inhabited Mount Sphincius, and created continual alarms in the country round about, by proposing dark and enigmatical questions to the inhabitants, which if they did not explain, she tore them to pieces. The Thebans in this dilemma consulted their oracle, who told them that the Sphinx would destroy herself as soon as any one could be found to explain her enigmas. Ædipus, allured by the reward held out to him of marrying the sister of the king, undertook the solution of the well-known riddle of Sphinx, which described man, and she, enraged at this explanation, dashed herself against a rock and died. Some, to explain this fable, have supposed that one of the daughters of Cadmus, who had been cheated of a portion of her possessions, infested the country about Thebes and committed continual depredations. It was said that the lion's paws expressed her cruelty, the body of a dog her lasciviousness, her enigmas the snares she laid for travellers and strangers, and her wings the dispatch she used in her expeditions.

The sphinxes are said to have been used by the Egyptians to show the rising of the waters of the Nile, but I know not in what manner. The Egyptian sphinx always represented the portrait of the Pharaoh whose

name in a cartouche was inscribed upon the breast. The form adopted most generally combined the human head with the body of a lion, to show the union of intellect and physical force. They were never rendered female in Egypt; but the sphinx of the Greeks had the head and breast of a woman. With that elegant people the combination was probably made rather to please the eye than to convey any sentiment, excepting that by reason of its mysterious character it came to be rendered the symbol of religion, both with the Greeks and after them with the Romans; for the latter certainly always placed a sphinx in the pronaos or porch of their temples, which must have been, therefore, introduced into their mythology. The Greeks had also, indeed, other combinations, that were merely the creations of a distempered fancy, such as the criosphinx, which had the head of a ram, and the hiemeosphinx with the hawk's head, and others. All these had also wings, which the Egyptian sphinx had not.

Before the pyramids at Memphis stands a huge rock, which has been carved into a colossal sphinx—a marvellous work, far surpassing every other artificial creation, both in size and height. It is cut from a vast mass, and is believed to have been formerly polished. The paws are distinct blocks which have been added, and between them stood a temple. The circumference of the head of this monster is no less than 100 feet, and its height, from the belly to the crown of the head, upwards of 60 feet. It is said to have covered the body of Amadis, who is believed to have been the Pharaoh who expelled the shepherd kings, about the time of Moses, and began the dynasty of those great Theban monarchs, whose temples, statues and obelisks have for more than three thousand years made the valley of the Nile a place of such exceeding archæological interest, and prove that Egypt was, at this time, the most highly cultivated country in the world. Rameses covered the walls with the most spirited sculptures, commemorating his conquests, and erected Karnac and Luxor, as also the Dromos, an avenue 1600 feet long, within a double row of sphinxes, which connected these two temples The date of their erection is believed to have been about the time of the exodus of the Israelites. Nothing is certainly known of Thebes subsequently, but it is believed that it passed into obscurity somewhere about the time of the reign of David, when Lower Egypt comes into the story of the grandson of that great king, Rehoboam, king of Judah, whom Shiskah conquered. An Ethiopian race of sovereigns afterwards arose as kings of the Sais, who, in later times,

until he grew to be a monster, when he was let loose upon the world. Some suppose that the truth of the story was, that the lawgiver's wife had become enamoured of one of the courtiers, named Taurus, and that Dædalus favoured the intrigue, the effect of which was that after a while the queen was delivered of twins, one of which resembled her husband, Minos, and the other her lover, Taurus—whence originated the compounded name of Minotaur.

The Dryads, Fauns and Satyrs were inferior chimeras, supposed to reside in the woods, and are therefore represented as having the legs, feet and ears of goats, with the rest of the body human. They were the representatives of the lowest view of men, and were monsters of lust and followers of Bacchus. Briareus was a chimera of the poet Virgil, and was represented as having fifty heads and a hundred arms, and it is said of him that he was one of the giants that stormed heaven. The Naiads and Sirens were fabulous beings, with the faces of women and tails of fishes. The Tritons were male compounds of the same varieties, but sometimes with the fore feet of a horse, and the body covered with small scales. Mermen and Mermaids are modern fancies of these same combinations, and these, it has been gravely asserted by many historians, have at times been actually met with living. The Harpy was a winged monster, who had the face of a woman, with the ears of a bear, the body of a vulture, with human arms, and feet armed with the talons of a carnivorous bird. These emitted an infectious smell, and spoiled whatever they touched, by their filth and excrements. This chimera is thought to have had its original in Egypt, and to have been an emblematic representation of the locust and other troublesome insects from the shores of the Red Sea, which were called Harop or noxious reptile. Moreover, the word *arpi* signifies, in Arabic, a locust. Hydra was a formidable serpent, with a hundred heads. Sometimes it was represented as a dragon, with a human head with serpents upon it instead of hair. It is said to have been subdued by Hercules. The fable is explained by supposing Lerna to have been a marsh infested with serpents, where there was a chief or leader called Hydra, whom the indomitable hero extirpated.

There remains yet to speak of Dragons, Griffins, Wyverns and Cockatrices. The first was an imaginary creature, represented with four feet, two wings, and a serpent's tail. It is said to have been the emblem of vigilance and safeguard, and was celebrated by the first poets of antiquity as the great conquest of their heroes. It has also been introduced into the

poetry of the moderns in some of the most splendid achievements of knight-errantry. The griffin is merely an heraldic chimera, denoting strength and swiftness, and is said to have been generated between the lion and the eagle, and to participate of both. A wyvern is a compound of a bird and serpent, having two fore feet, and is also exclusively heraldic. The cockatrice was something between a chicken and an adder, and receives more consideration than it otherwise merits, from being named by the prophets in a word that has been so translated. Shakspeare also speaks of the "death-darting eye of cockatrice."

The Andro-Sphinx is a term of modern application, to describe the class of chimeras which have been only found in Assyria and which have been also spoken of as bull-men; they are however found of two varieties, the one having the body and limbs of an ox, and the other those of a lion. They were first noticed by Sir John Chardin, in his travels through Persia in the middle of the 17th century, and more lately by Ouseley, Morier, Ker Porter and Alexander. "On reaching "the grand platform on which the palace of Persepolis stood, the first "objects that strike the traveller are the lofty sides of an enormous portal, "the interior faces of which are sculptured into the forms of two colossal "cubs. The proportions of these animals are admirable, and although the "manner of their execution is dry, there is a grandeur in their forms that "perfectly accords with the prodigious scale on which all around them is "designed. They have the body and legs of a bull, but an enormous pair "of wings project from the shoulders, high over the back, covering the "breast, whence they might indeed seem to spring, as the whole chest is "carved with the plumage. The huge feathers that compose the wings are "exquisitely cut in the marble. The heads of the animals look direct to "the mountains, and show the faces of men. The expression of the human "countenance is severe, and a long and carefully curled beard adds to the ma-"jesty of their general air. The ears are sometimes human and sometimes "those of a bull, and from them hang often large drop ear-rings, of a very "elegant form. The height, from the top of the crown to the hoof of the "animal, measures 19 feet. These were, at the time of their first discovery, "thought to be the only specimen of the human and bestial form united, "but very soon other examples came to light." An agate seal brought by Niebuhr from Basrah, is engraved with the winged bull and human head. A similar device was discovered on a cornelian brought by Ouseley from

Shiraz, as well as on some Greek medals, gems and bronzes. De Hancarville regarded this symbolic figure as "of prodigious antiquity," and anterior to any Grecian statue. The old travellers were indeed much embarrassed at the first discovery of these sphinxes; and various opinions were entertained of their meaning. M. Argentil de Perron regarded them, *on cogent reasons*, as a representation of Noah; and other learned men have attributed them to Cyrus, as an emblematic chimera or reference to his just sovereignty.

When Layard first discovered at Nimroud, in February and March, 1846, the winged human-headed bulls and lions of the Assyrian palaces, he "contemplated for hours these mysterious emblems, and mused over their "interest and history. What more sublime forms," he exclaims, "could have "ushered a people into the temples of their gods! What more sublime images "could have been borrowed from nature by men who sought, unaided by the "light of revealed religion, to embody their conception of the wisdom, "power and ubiquity of a Supreme Being! They could find no better "type of intellect and knowledge than the head of a man, of strength "than the body of a bull or a lion, of ubiquity than the wings of a bird. "These human-headed chimeras were not idle creations, the offspring of "mere fancy—their meaning is written upon them: they awed and "instructed races which flourished 3000 years ago." They are indeed wonderful creations, and we may also notice the very valuable aid given to history by their discovery, in consequence of the annals of the Assyrian Empire being written on these marbles in the Cuneiform character, and the wonderful skill of Sir J. Rawlinson and Dr. Hincks in decyphering them is entitled to our hearty praise.

Having now passed in review all the various chimeras that are known to our immediate reading (excluding the monstrous combinations of Indian and Chinese mythology), I am desirous of showing that the dates assigned to the late discoveries at Nineveh, considered in connexion with the dispersion and captivity of the race of Israel, give fair and reasonable ground to conclude that there may be derived a common origin to the first and last of the chimeras we have described as Cherubims and Andro-sphinxes. This idea struck the most celebrated Bible commentators, immediately after the discoveries at Persepolis, who saw that the colossal creatures there found appeared to personify the mystic creations of Ezekiel more exactly than anything previously

described; but there was no connexion at that time known between the Israelites and the Persians sufficiently intimate to justify a decided opinion. From more recent discoveries I would attempt to show *that the chimeras of the Assyrian marbles are representations of the calves of Jeroboam, and that these were themselves derived from the colossal figures we have named as having been erected by Solomon at the entrance of the oracle of the temple.*

The Scripture informs us that Pul, king of Assyria, invaded the land of Israel, and put Menahem, the king of the ten tribes, to a grievous and heavy tribute. This Pul is supposed to have been that king of Assyria who repented with all his people at the preaching of the prophet Jonah, and is thought to have been the father of Sardanapulus, otherwise called Sardan-pul. After the death of this mighty sovereign, there arose two considerable kingdoms out of his vast dominions—one of which came under the rule of Arbaces, one of his generals in Media, and the other under Belesir, another of his generals at Babylon. The former is the same as Tiglath-Pileser—that is, Lord of the Tiglath or Tigris—who fixed his royal seat at Nineveh. The other is the same with Nabonasar—the Baladan of Scripture (from which monarch dates the celebrated era of Nabonaser, that is, B.C. 747)—and he fixed his residence at Babylon. It was at this time that we read of Ahaz, king of Judah, who being closely pressed by the kings of Israel and Syria, applied in his distress for the assistance of the Assyrian monarch. Tiglath-Pileser gladly availed himself of the opportunity of extending his frontier westward; and having taken Damascus and slain the king of Syria, he turned his arms on Pekah, king of Israel, whom having also conquered, he carried off the trans-Jordanic tribes of Israel into captivity. Soon after this, Shalmaneser, the son and successor of Tiglath-Pileser, beseiged Hoshea, who had become king of Israel by the murder of his predecessor, in Samaria, and after a siege of two years, took the capital, and transported the king and all the remaining tribes into captivity in Media. A curious record of this transaction has been "graven with an iron pen, and lead in the rock for ever." Upon the perpendicular surface of a smooth mountain, on the road leading to Hamadan, in Persia, there still remains a remarkable piece of sculpture, representing a king in his royal dress, and distinguished by his colossal stature, attended by his generals, having ten captives before him, on the neck of one of whom he places his foot. The captives have that peculiar cast of physiognomy

by which the Jews have ever been distinguished, and one of them bears a mitre, which was possibly the emblem of a priesthood; though it will be remembered that the tribe of Levi did not form one of the captive ten, and during the far greater part of the schism adhered to the kingdom of Judah. On the same mountain are to be seen two tablets, inscribed with the arrow-headed writing of Persepolis, which have not yet been decyphered.

Senacherib, called Sargon in Scripture, succeeded Shalmaneser. This sovereign is now known to have builded the palace at Khorsabad, which was the earliest public building discovered among the Assyrian ruins by M. Botta, before Layard went to Nimroud. In the ruins have been found inscribed on stones, in the cuneiform character, the most detailed and ample annals of the conquests of Sargon and his father. Unfortunately, one inscription, containing the account of the campaign against Samaria has been so injured by the fire which destroyed this palace, that it cannot be made out, but in others the sovereigns are styled "conquerors of Samaria and of the "circuit of the house of Omri." This title is remarkably appropriate to the known history of Israel, for Omri is the king who is named as "he who "brought the hill of Samaria from Shamar"—and thus conferred the name. On another monument mention is made of Jehu the son of Omri, and Hazael king of Syria, and on a stone, happily preserved and sent to Paris, it is recorded that 27,280 Israelites were carried into captivity from Samaria and the several districts and provincial towns dependent on that city. Esarhaddon succeeded Senacherib, and constructed the south-west palace at Nimroud. He is thought to have been the father of Nabuchodonosor, the Assyrian king of Judith's history.

The names of all the several Kings of Assyria who builded the palaces of which the ruins have been recently discovered by Botta and Layard have been recorded in the cuneiform character on the stone sculptures at Khorsabad, Nimroud and Kouyunjik, and having been deciphered by Rawlinson and Hincks, a complete genealogy of these Kings, for the space of 300 years, has been determined on. The question as to the great space allotted to the city of Nineveh by Jonah, and during the time of its greatest prosperity, may not be considered quite set at rest; but it is thought that all these palaces, of which the ruins have been lately discovered, formed the vast group of buildings popularly known as the capital of Assyria. It is not, however, considered that all these spacious edifices were existing at the same time: on the contrary, as the palace of

one King was destroyed or fell into decay, another was raised by the succeeding monarch. But it was a common custom among the ancients to erect their new buildings out of the ruins of former ones and to transport all works of art or celebrity from the old building to the new.

Thus the N. W. palace at Nimroud had been originally founded by one of the earlier Kings, and had been deserted and suffered to fall into ruin. Sargon rebuilt this palace as well as the one at Khorsabad, and in both of these structures were first found the Andro-sphinxes. In the annals over the gates it is written "he made a palace of his dwelling, and placed "pillars at the gates," but we find no evidence that the colossal chimeras had been constructed prior to the time of the monarch who conquered the ten tribes; we will, however, shew that by the language of prophecy, it would seem that the "calves of Beth-haven" were to be given as a present to the conqueror; and we will proceed to enquire what is known of those chimeras that were certainly set up for worship by king Jeroboam, on the confines of his kingdom of Israel.

It is (as is well known) recorded of this king of Israel, that he had reason to apprehend his subjects might return to the allegiance of the house of David, if they were permitted to go up thrice every year to worship at Jerusalem, and that addressing himself to the personal convenience of the votaries resident at a considerable distance from that city, as well as to secure the dominion he had usurped, he set up two images, one at Dan and one at Bethel, where he also established a chapter of spurious priests, who offered their accustomed sacrifices to the God of Israel. These images were called *calves* in derision; but it is difficult to conceive how a calf or any other animal could of itself, in the condition of religious advancement that the Israelites had at this time attained, have been deemed a symbol of the deity, and have been worshipped as God. It is the opinion of many learned men that the golden chimeras called calves which Jeroboam made were copies of the cherubim of Solomon's temple. They were certainly allied to them in form and import, if not actually imitations.

Several Rabbis and the generality of interpreters, ancient and modern, agree in the supposition that the colossal Cherubims, which upheld the porch of the Holy of Holies, were of human form, with the addition of wings, and made in some sort to resemble flying oxen. Faber says that

"there were in the temple at Jerusalem two compound figures of the eagle, "man, lion and bull, in which the latter form most chiefly prevailed." The porch of the oracle of the Temple appears to have resembled in form the doorways of the chamber of the Assyrian palaces; in these latter the bull-men were on the side of the wall, and their wings like those of the Cherubim. The space or room called the oracle was a cube of about 35 feet. The colossi, made of wood and placed therein, stood 17 feet high. The Assyrian bulls are from 12 to 15 feet high. Nothing of course has been ascertained of the form or magnitude of the calves of Jeroboam, but it is said distinctly that the king erected, at two different spots in his dominions, two golden calves, in exact imitation of the cherubic emblems in the sanctuary, and that he placed them in open view, so that all might through them worship the God of Jacob, without repairing to the temple at Jerusalem.

From hence we proceed to give a probable account of Jeroboam's idolatry in setting up two figures resembling those at Jerusalem, and now, as we believe, exactly pourtrayed in the Chimeras or Andro-Sphynxes of Nimroud in our own British Museum. It must appear to every reflecting mind, in reading of the great sin of Jeroboam, "who made Israel to sin," that it would have been too stupid in the Israelitish people if they who, not above thirty years previously, had witnessed the dedication of Solomon's temple with great signs and wonders, should have so readily fallen into the old senseless idolatry "of a calf that eateth hay." And some misconception of the symbol employed by Jeroboam has, perhaps, arisen from connecting it with the golden calf set up by Aaron in the wilderness, which there is every reason to believe was the representation of the god Apis, whom, perhaps, many of the Children of Israel at that period might have already worshipped in Egypt. How could Jeroboam think of making those who had habitually gone up to Jerusalem all their lives stop and worship these dumb idols as those "who had brought them "out of Egypt?" It relieves our conceptions, however, very much if we consider these "calves" as the very representation and copy of the cherubim which stood on either side of the oracle of God. For thus they were the same figures that would always have met their gaze in the Temple,—as they could not have ever been admitted "within the vail"—so that Jeroboam, with much more worldly wisdom than he has ever received the credit of, desired to establish a continuance of the worship of the true God, and

adopted for that purpose the same symbols of the Divine presence to which the people had been accustomed to look in their worship at Jerusalem. It ceases, then, to be any wonder that they so generally fell in with him in the alterations he required as to the place of their accustomed sacrifices, especially if we attend to the consideration of the many plausible things he might allege on this head. He might have shewn his people that the ancient and usual practice of the holy patriarchs, their forefathers, was to build altars, and to worship God wherever they came to make any stay. Abraham had thus sacrificed at Bethel—nay, the ark itself was for many years at Shiloh before David removed it to Jerusalem, and he and his people had sacrificed there, and their sacrifices had been accepted by God. He could urge that the whole land, therefore, was alike holy, and that it was mere superstition to imagine that the presence of the Almighty was limited to one place more than another. Moreover, he might have alleged that if Jerusalem had been expressly set apart by Divine appointment, "when the glory of the Lord filled the sanctuary," yet that Solomon had so defiled the land by his idolatries that any other place might be equally pure and proper for solemn worship. It has never indeed been supposed by commentators that the sin of Jeroboam was the worship of another God than Jehovah, but rather the bold impiety of setting up a scheme of his own, without any divine appointment, and for reasons of a purely secular or political character.

We may from these considerations conclude that the "calves" set up by Jeroboam were the same Andro-Sphinxes that Solomon had erected, if not by command, at all events by permission, in the temple of Jerusalem. The worship thus set up by Jeroboam continued to be the sin of Israel till the destruction of that separate kingdom by the Assyrians, when the people were carried away captive to Media and Nineveh. What then became of the "calves" in the deserted land? The prophet Hosea had distinctly predicted that "the calves of Beth-aven should be carried unto "Assyria for a present for the king," and we know that it was the custom of eastern nations to carry away as trophies the gods of conquered countries. Doubtless, therefore, they were conveyed to Khorsabad or Nineveh, where the conqueror resided, and where he was at the very time building his mighty palaces: what, then, so illustrative of the pompous inscriptions that he there set up to record his victories, as these wondrous colossi

that he had brought away with him as trophies, and now set up in the porches of his palace! Within a very few years of the removal of the calves, the mighty Temple of Jerusalem itself was destroyed, and it is remarked of the Assyrian halls where the winged bulls were, that in many of the decorations about the doors of the chambers there were carved the same patterns of palm leaves and open flowers, the pomegranates and lilies, that had adorned the building of Solomon. This fact very much corroborates the notion that Sargon drew from the Holy Land the designs for the adornment of his new palace, and thus the human headed bulls were again allied at Nineveh with the decorations with which they had been surrounded in their original position at Jerusalem, from whence, however, we do not hear that the cherubim were removed, but being of wood they were probably burned in the destruction of the Temple by Nebuchadnezzar.

Although it is no part of my object to allude to the mystic language of prophecy, further than by the slightest possible allusion to it in corroboration of my arguments, yet it cannot fail to strike every one that there is something in common between the Andro-Sphinx and the creatures mentioned by Ezekiel and St. John. That when once the fashion of the cherubim of the Temple had passed into Assyria and Persia, through the similitude of these chimeras, they should be re-adapted into the imagery of the prophetic vision may not appear extraordinary, when we observe how very generally the taste for them had spread among these mighty oriental architects. Thirteen pairs of these gigantic sculptures, and several fragments of others, have been discovered at Nimroud, besides those found by Botta at Khorsabad, and by Chardin and others at Persepolis. It must be remembered that kings and conquerors have frequently borrowed from their neighbours matters of design and decoration, as confirmed from the Bible account of Ahaz, king of Judah, who when he went to meet Tiglath Pileser, at Damascus, "saw an altar" which he copied, "and set up the fashion of the altar at Jerusalem." But to the minds of the conquerors of Judah and Israel nothing was conveyed of a religious character by the imitation of the colossal chimeras. They were simply decorative trophies recording their glories. In the same manner they seem to have introduced into their palaces the Sphinx which had been found at Nimroud, but as this may have been derived to them from Greece, it opens a question whether Greek workmen may not have been employed to work the

Assyrian Andro-sphinxes, for the bodies of the bulls and lions found there are exquisite in their proportions, and the beauty of the details in the accompaniments and in the wings is elaborated to the utmost. The heads, also, are exceedingly expressive and fine, and though the muscular expression is coarsely marked, the limbs are not deficient in indications of anatomical knowledge.

The doubts that had existed amongst all Bible commentators as to the form of the cherubim and the mystical prophetical representations of the Deity, may be almost set at rest, by the discovery of the Andro-Sphinx, as found at Nimroud and Persepolis. A combination of man, lion, ox and eagle has now been pourtrayed with satisfactory clearness from the chimeras of the Assyrian people who conquered and led captive the Jews. We now see how they could stand upon the earth, and be made to support the vaults of the sanctuary, or attain to the proportions and magnitude assigned to them. The "calf" set up by Jeroboam is also rendered more intelligible if we believe that it was only an imitation of cherubim, and in the wisdom of God we are now enlightened in all these matters by the remains that have been so wonderfully preserved for our own observation and instruction.

The time of the discovery of the sculptures at Nimroud has been singularly opportune. Had they been earlier exposed to observation, the inhabitants of the land would probably have destroyed them. Had they been found later there might have been insurmountable obstacles to their removal. Now we have them safe in the museums of Europe, where they can be seen and valued. They supply the most convincing evidence of the magnificence and power that made Nineveh the wonder of the ancient world and her fall the theme of the prophets. They are most useful in elucidating, in a remarkable degree, many dark things in Scripture history and in corroborating its truth in its ordinary details. The name of Senacherib as the conqueror of Israel is now found recorded in the cuneiform character on these masses of stone, and the accounts of his wars in Israel and Judah. The chimeras at Khorsabad, though much injured by the fire that had destroyed the palace in which they were found, are covered with inscriptions on the lower portions of the animal figure, so that some of the most precious discoveries that the monuments of the ancient world could supply will doubtless soon reward the labour of the learned antiquary.

On the four bull-men brought from the palace of Kouyunjik were two inscriptions that have been now deciphered by Hincks and Rawlinson. They contain the annals of six years of the reign of Senacherib: they describe the conquest by that mighty king of Hezekiah king of Judah, and name to a shilling the amount of the tribute in gold which it is stated in the book of Kings had been raised upon that sovereign; and a slab in the museum of the East India Company in like manner records the annals of king Nebuchadnezzar, and breaks off for a space, where it is stated he was afflicted with a mental disease that had interrupted his course of glory. In the Assyrian marbles there is a representation of the raising into its place of one of these mighty chimeras. The king is seated on his throne, while thousands of slaves are working at the machinery; and in another palace there are two majestic human-headed bulls, fourteen feet long, which were left unfinished, as if the murder of Senacherib by his sons "as he worshipped" had put a sudden stop to his great undertaking.

It must be confessed that there is always something inexpressibly interesting in thus fitting together, as it were, the record of past times, by the light of contemporaneous history, and it is doubly gratifying when these labours can be brought to explain and adorn Scripture history. Since, after all the pleasures of learned study, it is the Bible which illustrates all other books, and her enlightenment accompanies us to the utmost goal of our existence with the satisfactory conviction that its sublime truth has been given to man to smoothe his departure to that world where all chimeras and mysteries shall have an end.

NOTE.—The illustrations in Plate II consist of copies, from various points of view, of a sphinx in black basalt, 2¼ inches long, the property of the Right Honourable the Lady Marian Alford. It is almost as perfect as when it left the sculptor's hands, probably 3300 years ago, and is believed to be quite unique. In each of the fore feet is a wine-cup; the human face is the portrait of *Mer-en-ra*, a king of the sixth dynasty, as set forth in a minute cartouche between the fore legs and in a larger cartouche at the bottom of the plinth, the hieroglyphics of which read as follows:

"King of Upper and Lower Egypt,
"MER-EN-RA,
"Who loves the God
"Lord of the Temple."

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Allow me to suggest
a measure being resolved upon by the Corporation, and, as I understand, with so much liberality. In a country where public museums and public libraries are rare, it is honourable to be thus foremost in extending the means of education; admitting, what would seem in other places to be disputed, that business and commerce are not incompatible with science and literature. It seems only as yesterday, in fact it was only a few years since, that the metropolis of Great Britain, as represented by the citizens of London, rejected with scorn and indignation the efforts of Mr. Ewart, Colonel Sykes and others, to give them a museum and public library. In a large meeting in the Mansion House, the Lord Mayor in the chair, they scouted with derision and insult the advice and services of those who suggested what the people of Liverpool are now so anxious to obtain; and upon the unworthy and selfish pretence that the trifling tax required could not be conveniently paid, stamped, in the open daylight and unblushingly, their

own ignorance, and publicly endorsed their desire to remain as they were. Thus the ancient city of London, the antiquity of which its citizens find it convenient on certain occasions to boast of, remains without a public library, and without a public museum for those monuments which would justify its claims to an ancient origin and illustrate its early history. The people of Liverpool are doing spontaneously what the citizens of London would not be persuaded to do; and with the advantage of a Society established for purposes analogous to, if not identical with, those which the Corporation must have in view in founding such an institution, there is every reason to expect that the undertaking will be conducted in an enlightened and liberal spirit, and be guided by experienced counsel, such as so many of the members of the Historic Society are eminently qualified to give.

I look upon public museums as schools for supplying, on a broad and comprehensive scale, those means for the completion of education which are not afforded in the ordinary course of scholastic training. They should be academies both for youth and for man, in which they may, without cost and labour, obtain easy reference to collections of works of art and of nature, which are indispensible to the successful prosecution of the various arts and sciences, such as their tastes or their necessities may incline them to study. If a youth be born to fortune, he is morally bound, if he would not be a lounger in society, and pass out of the world with but few more ideas than when he entered it, to follow some industrial employment, some art or some science. If his destiny be physical labour and, possibly, mental toil combined, he should not be debarred, by negligence or indifference in the wealthier classes, from cultivating intellectual pursuits, and from readily securing that assistance in the study of any branch of learning or science to which his organization, his tastes or his aspirations may direct him. Society expects much of its members; but it often expects unreasonably. To say nothing of absolute criminals, how many do we find in all ranks and every where, profligate of money and of time, addicted to frivolous and vicious amusements, without character for anything good; and mere drones in the industrial hive! And yet perhaps many of these were meant by nature for something better: some, probably, were endowed with capabilities which, had they been fostered and directed in earlier life, might have

> "Raised them from a coachman's fate
> To govern men and guide the state;"

or at least, might have helped them to better positions in society, in which

they could have contributed something to the general store of human knowledge, and to their own permanent happiness. It is particularly in great and flourishing communities, in prosperous and wealthy cities, that the incentives to mental culture can be best displayed, and are most needed: there the rulers hold in their hands the intellectual destinies of the rising and future generations; they should therefore feel that popular education is one of their most sacred duties, a duty which their wealth and their power make them responsible for discharging actively and generously.

When I say that every branch of human knowledge should be represented in a great public museum, the degrees in which they are to be represented will have to be considered. Man, the lord of creation, stands first:

"Heaven's hallowed image stamp'd upon his face."

Man, endowed with reason, to whom all earthly things are subject, but who is wholly dependent upon education for being raised much above the higher classes of some other animals; who without education is a savage and a cannibal; but trained, and placed under conditions favourable to the development and full play of reason, capable of moral and physical achievements to which, it would seem, it is difficult to set limits. From the ground upon which I now stand, let us throw but a glance around: we need not look to the pyramids, and to what were the other wonders of the ancient world; let us look upon your own town, its buildings, its institutions; and chiefly its spacious docks and shipping, through which you subjugate the distant ocean, and bring the produce of remote countries, as from your own fields, into your garners and storehouses. Contemplate Liverpool—what it *was* and what it *is;* and we need not go further to illustrate the power of man.

As examples and models of museums, in our own country, which hold the highest position for their historical monuments, we must cite those of Caerleon (in South Wales), York and Newcastle-upon-Tyne. The first two are devoted to inscriptions and other monuments discovered in and around those ancient towns; the last takes a wider range, and embraces the long line of the Roman Wall, and the great military stations which flanked it on either side. Caerleon (*Isca Silurum*), the Itinerary of Antoninus informs us, was the permanent station of the second legion. The monuments, as may be supposed, bear a direct reference to the soldiers and officers of

this legion, and their relatives. A similar historical and monumental connection exists between the sixth legion and York. On the other hand, the inscriptions deposited in the museum of Newcastle-upon-Tyne contain records of all the legions serving in Britain; and moreover, of the numerous auxiliary troops so frequently summoned from distant parts to defend the frontiers from the incursions of the Caledonians and the Picts, and to build and repair that masterpiece of engineering skill, the great Roman Wall, its chain of walled camps and watch towers, its military way and other subsidiary works. But for these lettered stones, which in the middle ages and in modern times often did service as building material, we should have been quite ignorant of the full amount of the Roman forces in Britain and of what was really their composition, for historians supply but little of detail in their reference to events in Britain. Nevertheless, what statements have come down to us are fully confirmed by this monumental evidence and frequently amplified in a manner as satisfactory as unexpected. Unaided by these revelations, which the tutored eye and good feeling of a few studious persons have recognised, saved from utter destruction and made public property under safe guardianship, the historians of England have been compelled to dismiss in a few pages the momentous events of four centuries; and thus the annals of this long period remain almost excluded from popular education. By these inscriptions we may not only learn how the military occupation of Britain was maintained, but also the names of the various bodies of troops drafted from all parts of the empire, their commanders and the works they were employed upon in peace as well as in war. In them we also find sources of other curious and valuable information. They contain an epitome of the popular mythology of Britain, which we should seek for elsewhere in vain. Besides the divinities of the Pantheon, with which the classical scholar is acquainted, we read the names of a multitude of unknown gods and goddesses, whose appellations are almost always derived from localities, often from the places in or near which the dedications are found; but not unfrequently from far distant countries, in consequence of vows, implied or expressed, made by the adventurous travellers whom war or commerce had induced to seek remote and often inhospitable shores. The ancients were not content with the supervision of the gods of Olympus; they sought their special interference for towns, villages, districts and fields, by surnaming them from the places themselves, precisely as in after times the Virgin and Saints were and still are invoked.

In numerous instances the divinity was addressed as the god or goddess of such and such a place; and in these cases we often recover the ancient names of places.* The continental museums have of late years gathered together a considerable number of this interesting class of monuments.

In France most of the public museums, and there it is rarely found that any town is without one, are exclusively appropriated to historical collections. The small towns enable the visitor to read in their monuments something at least of their condition in past ages. The larger towns and the cities take a wider range. Lyons may be briefly mentioned as one of many. There the spacious arcades of the public Exchange are entirely filled with the ancient monuments discovered in the city and its surrounding districts; and the merchants who daily assemble there are surrounded by memorials of those who exercised their respective callings upon the same spot fifteen centuries since. There are preserved inscriptions recording the wine-merchants of the Roman city, the glass-makers, the saga or cloth-makers, the corn-dealers, the plasterers, the masons and other trades and professions; the names of streets and public buildings, magistrates and other civic functionaries; and the ancient bronze tablets, containing a copy of the speech made in the Senate at Rome by the Emperor Claudius, proposing that the men of Lugdunum (Lyons) should be admitted to the rights of Roman citizenship. Opening into these arcades are rooms filled with minor works of art of the most precious kinds; the whole being a vast assemblage of monuments of the former opulence and trade of the city, and of the arts, the religion, the habits and customs of the inhabitants; the whole of which might easily have been destroyed or lost, had Lyons been as indifferent to her ancient history as London has been; and had her merchants and rulers wholly concentrated their thoughts upon the time present, and disabled their minds from the power of comprehending and estimating ought beyond the sphere of their mere worldly vocations.

But nearly all the towns of France have museums of local antiquities: the larger, such as Toulouse, Marseilles, &c., on a scale so grand that they can only be appreciated by being seen The smaller towns all equally possess museums, devoted to remains of antiquity found in and about them. They differ from our English museums in their pure historical character.

* Horsley's "Britannica Romana;" "Antiquities of Caerleon," by J. E. Lee; "Eburacum," by Rev. C. Wellbeloved; Hodson's "Northumberland;" "The Roman Wall," by Rev. Dr. J. C. Bruce; "Collectanea Antiqua," &c.

They are not mere assemblages of stuffed birds and beasts, South Sea Island and Chinese curiosities, and other heterogeneous matters which make up the old-fashioned and approved English museum. In its proper place, the French honour Natural History as much as we do. But they admit, as all who reflect must admit, that the proper and the chief study of mankind is man, as he is and as he was, in all his relationships with his fellow-men, in the present and in past ages, for it is impossible to dissociate them if we would study properly. The blessings and advantages which knowledge and industry have secured for us can only be estimated by an acquaintance with the past, as the traveller can only tell how far he has progressed by calculating from the starting-point. The advantages we possess in worldly comforts, the institutions under which we live and flourish, the liberty we enjoy and the force of mind we possess to maintain it, are only in a small degree due to our own efforts: they are an inheritance bequeathed by our ancestors and predecessors, who through long ages of toil and sacrifice have slowly accumulated knowledge and power, to which we have added; but without which our times might have been like those dismal primeval days,

"When wild in woods the mighty savage ran."

It being conceded, as I think it must be, that the province of History should occupy the chief place in every public museum, its divisions are easily indicated. I have ever advocated that every museum should exhibit the antiquities of the neighbourhood, because they often bear the influence of local circumstances; and dissociated from the place which gives them a marked character and meaning, they are often shorn of their highest interest. Here is an instance in illustration:—At Cambridge is an altar, reading, as it seemed, *Apollini Aponio*. Various interpretations were made of this surname of Apollo, but none were satisfactory. I suspected that a solution might be found in the ancient name of the place where the altar was discovered. Luckily, (for it is not always the case, after a long separation, that the origin of antiquities can be ascertained,) there was a record of its having been obtained, many years since, from the neighbourhood of Carlisle. Finding, from an ancient list* of Roman towns and places in Britain, a town or military station called *Maponi*, I immediately inferred from analogy that the word upon the altar was *Maponio*; and so, upon a

* Anonymi Ravennatis Britannica Chorographia.

close examination, it proves to be. The signification is palpable, and we are authorised in assigning the name *Maponi* to the locality where the altar was found, from which the inhabitants had surnamed the deity. But many equally striking exemplifications can be adduced for other classes of antiquities. Where should we, for instance, look for specimens of the works of great artists more naturally than in the places where they lived and wrought them? Take Wedgewood, for example: where should we seek, if not at Liverpool, for a complete collection of his elegant and beautiful pottery?

In the next grade should stand the general antiquities of the country; and, extending the circle, those of the neighbouring countries from which our ancestors emigrated, and whose relationship is reflected in the objects themselves. Here our Saxon remains, which reveal in so remarkable a manner the true condition of the successors of the Romans in Britain, plead an ancestral claim to our regard. Who can survey the arms, the ornaments, the rich jewelry, the glass drinking-cups and their other funereal accompaniments, without feeling that he has something to unlearn and much to learn of the peoples who populated Roman Britain, from whom we so largely draw our existence, and derive so much of our customs, laws, institutions and national character? Followed by the Norman and Mediæval series the eye will read much of the spirit of the various ages they represent, and will perceive, in their juxta-position with the Roman, how much they were all influenced by the types of that section.

As we sail up the stream of time, we approach the shores of the nations of classical antiquity; the Romans and Greeks, whose poets, orators, philosophers and historians supply, and ever will supply, so long as depth of thought, elegance of language, genius and morality are prized, the rich pabulum of classical education; whose artistic works are studied as the only models of perfection by our painters and sculptors, if indeed they would arrive at excellence in their profession. Your own eminent Gibson, were he here, would acknowledge that his taste and genius spring wholly from the high and pure ancient school in which he studied. The architect, whatever style he may subsequently adopt or favour, must found the basis of his education upon the refined taste of the ancients: the builder and mason do not study the materials used by the ancients, and their bricks and mortars are consequently void of tenacity and durability. Where can models of statues, of temples, of theatres, of bridges, and such like, be studied by those young

artists who cannot afford to travel, unless it be in public museums? The French Government, with provident care, furnishes the chief public museums of the provinces with casts from the finest statues and architectural models; and the result has been not only that the arts and artists have been encouraged to good effect, but that the public taste has been improved and elevated, as will be apparent to every one who visits the towns and cities which make science and literature part of their municipal constitution.

When we survey the monuments of the land of the pyramids, and those of Babylon and Nineveh, we are, as it were, in another world, filled with marvellous works, the great historical importance of which has only in modern times, and mostly at the present day, been fully revealed by the successful researches of men, whose published labours are hailed throughout the world as triumphs of energy, self-sacrifice and sound learning. It surely is only right that in all countries where the Bible is read and taught, the public museums should aid the teachers by giving access to monuments which illustrate its historical portions. There is no book which takes firmer hold of the youthful fancy, or more strongly excites the curiosity and imagination; and therefore the mind is open and prepared to receive that instruction which would elucidate much that is obscure and mysterious, and by the simple exposition of ocular and tangible objects set the seal of verification upon doubted passages or statements, and make assurance doubly sure.

I have referred to some of the more bulky monuments of antiquity, such as demand space even when assisted by reduced models. Sculpture, architecture, inscriptions, the monuments of Egyptian and Assyrian art, and the various classes of minor antiquities, such as the works of the potter, the jeweller and the war-smith, require a wide extent to be properly exhibited, and a reserve of room is most necessary for new acquisitions. The object of the directors of a public museum should be, not hastily to fill the apartments, but to arrange and classify in a correct and judicious manner; because the public will ever appreciate a liberal and enlightened spirit, and valuable donations will be constantly filling the vacancies.

I now direct attention to a class of monuments of a different kind, which does not require but a very limited space, although it will necessarily claim other indulgences and privileges. From its costly character, only public museums supported by liberal funds can do full justice to its peculiar

requirements. It is the cabinet of ancient coins. In these small objects we fortunately possess a rich and inexhaustible mine of the most valuable historical materials. They may be indeed considered as histories in themselves; as histories which have come down to us fresh from the hands of the writers, free from errors, interpolations and those injuries of time and barbarism which have so much destroyed or defaced the larger monuments of antiquity. The study of them has accordingly engaged the entire lives of scholars in most countries since history and literature have been appreciated; ponderous volumes prove the fertility of this field of research; novel discoveries and investigations yearly feed the press; and three periodicals, the "Numismatic Chronicle," the "Revue Numismatique," and the "Revue Numismatique Belge," show that the science of numismatics, while it is acquiring popularity, is daily developing new discoveries, of more or less historical importance. I shall not here attempt to discuss the merits of ancient coins, when individual specimens may be selected by thousands, which contain themes for essays; they not only illustrate written history, but they frequently are the only records of events of great moment, of which no information is furnished elsewhere. Gibbon, before he commenced his great historical work, included in his studies that of ancient coins; and the "Decline and Fall of the Roman Empire" is evidence of the assistance which the Roman series afforded the illustrious historian. If all other monuments of the Greeks and Romans had perished, coins would have perpetuated their artistic skill and genius, their conquests, their alliances, their public works, their mythology and much of their general history. Considered merely as works of art and fancy, how much of fine poetic imagery is displayed in the personifications with which they abound! What models they afford to the painter, the sculptor, and the architect! And they are the more precious as supplying frequently the only representations of public edifices and of historical personages which time has spared. In the words of Pope—

> "Ambition sighed: she found it vain to trust
> The faithless column and the mouldering bust;
> Huge moles whose shadows stretched from shore to shore,
> Their ruins perished, and their place no more!
> Convinced, she now contracts her vast design,
> And all her triumphs shrink into a coin.
> A narrow orb each crowded conquest keeps;
> Beneath her palm see sad Judea weeps.
> Now scantier limits the vast arch confine,
> And scarce are seen the prostrate Nile and Rhine;

A small Euphrates through the piece is rolled;
And little eagles wave their wings in gold.
The medal, faithful to its charge of fame,
Through climes and ages bears each form and name;
In one short view, subjected to the eye,
Gods, emperors, heroes, sages, beauties, lie."

The Pembroke and the Devonshire cabinets of coins gave reputation and honour to two noble families; but like most other large private collections, they have been dispersed by the auctioneer and for purposes of reference are lost to the public. Public museums, such as the Hunterian Museum at Glasgow, and the British Museum, are the only establishments which can be relied upon by the student to assist his numismatic inquiries; but these are far apart, and no place could be better selected than Liverpool for a collection of ancient coins, lying, as it does, midway between the two. The constant dispersion of private collections renders their attainment comparatively easy; but, as previously observed, they are often of high price, and require great experience in selecting.*

In claiming for the works of man the first place and the widest space in our public museums, we base our claims upon their absolute necessity for educational purposes in the highest branch of human knowledge; upon the comparative difficulty with which they are obtained; and upon their tendency to be injured by time and accidents. Unlike most of the objects in natural history, they are costly, and when destroyed cannot be replaced. In nature the process of regeneration is always going on: her creations are boundless and endless, and comparatively accessible. They can often be best understood in their peculiar habitats, and the exertion required in there studying them is but a healthy and pleasurable excitement. It is not so with the works of ancient art: they know no second youth, no renovation, they can only be individually preserved; and if destroyed, like the sibyl's leaves, may be regretted, but cannot be recovered.

* The historical importance of a collection of coins, when formed with judgment, is evidenced by Admiral Smyth's "Descriptive Catalogue of a Cabinet of Roman Large "Brass Coins," and by Mr. Hobler's recently published catalogue of his cabinet, entitled "Records of Roman History," in 2 vols. 4to. Mr. Hobler, anxious that his collection should be preserved in its integrity for reference, offered it to the City of London, and to several of the chief towns, but in vain, and it was consequently dispersed by the auctioneer's hammer. The printed volumes show how valuable it would have been in a public museum, and how difficult it would now be to gather together so many rare specimens. The work is also a proof of the exhaustless information that is to be obtained from the study of ancient coins. This remark applies with equal force to Admiral Smyth's volume.

ON THE FLORA OF PRESTON AND THE NEIGHBOURHOOD.

PART II.*

By Mr. Charles Joseph Ashfield.

READ 16TH FEBRUARY, 1860.

Pinguicula vulgaris, Linn.—On the north side of Beacon Fell, by the footpath to Bailey Hey; plentiful on Nateby Moss, Mr. Jas. Pearson of Rochdale.

Lemna polyrhiza, Linn.—Near Euxton, Mr. Henry Scott of Chorley.

Fedia olitoria, Vahl.—In many dry fields near Rufford, in the direction of Martin Mere; upon a bank by the road side at Stainall.

——— *dentata*, Vahl.—Abundantly in a corn field on the south side of Rufford Park, and also in a corn field between Cockerham and Glasson Dock. Corn fields near Poulton Railway Station.

Crocus vernus, Willd.—At Many Brooks, Moon's Mill.

Iris fœtidissima, Linn.—In Whinny Lane, in Euxton.

Scirpus sylvaticus, Linn.—In many places by the Salwick brook, near Cottam Mill, and from thence towards Lea.

Eleocharis pauciflora, Link.—Moors in Heath Charnock, Mr. H. Scott.

Eriophorum vaginatum, Linn.—Farington Moss.

Melica uniflora, Linn.—Ravine above Greenhalgh Castle, Mr. Pearson.

Galium Mollugo, Linn —I am inclined to think that this is an error: I have searched the neighbourhood of Beacon Fell twice this year in vain for the plant.

Parietaria officinalis, Linn.—Plentifully upon walls at Wardleas.

Potamogeton pusillus, Linn.—In the canal between the first and second bridges, above Preston.

Myosotis collina, Hoffm.—Occasionally in dry sandy fields above Rufford, in the direction of Martin Mere.

——— *versicolor*, Lehm.—Occasionally in dry places on Croston Moss.

Borago officinalis, Linn.—Common, as a weed in gardens at Garstang and Saint Michael's, Mr. Pearson.

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* See vol. x., p. 143.

Primula farinosa, Linn.—Mr. Pearson informs me that the Rev. J. Ducker, a friend of his, has found this plant upon Kitchem Hill, near Whitewell.

Hottonia palustris, Linn.—Ditches near the footpath from Cockerham church to the sea; plentifully in ditches about Marton Moss, near Lytham. Ditches at Croston Moss.

Lysimachia vulgaris, Linn.—Ditches near Greenhalgh Castle; Winmarley Moss, Mr. Pearson.

——— *nummularia*, Linn.—Very abundant upon a bank below a wood at Lower Brockholes.

Anagallis cærulea, Sm.—Mr. Pearson tells me he found a few plants of this species on the embankment of the Wyre, opposite Preesall, in 1851.

Convolvulus Soldanella, Linn.—In many places between Blackpool and Fleetwood, and occasionally between Fleetwood and Wardless.

Campanula hederacea, Linn.—Nickey Nook, sparingly; Nateby Moss, Mr. Pearson. He says he has not found it in the former locality since 1854, although he has looked for it repeatedly since.

Euonymus Europæus, Linn.—In a hedge by the side of the road from Clitheroe to Sabden, near the Four-Lane-Ends.

Viola odorata, Linn.—Watery Lane, Fishwick; bank near Hollinhead Fold, on the road to Wood Plumpton; abundantly by the side of a lane leading from Walton Bridge towards Melling's Wood.

Verbascum virgatum, With.—I have this year (1859) found a few plants of this species between Wardless and Fleetwood.

Datura Stramonium, Linn.—Occasionally on the beach at Lytham, near the Clifton Arms Hotel.

Erythræa pulchella, Hook.—On a bank at Bispham, near Blackpool, sparingly.

Rhamnus catharticus, Linn.—On rocks at Ridding Hey, near Clitheroe, and in hedges in that neighbourhood; near Clitheroe Castle.

——— *Frangula*, Linn.—Near Beacon Fell, by the side of the road from the Derby Arms, a single shrub, 1859.

Ribes alpinum, Linn.—Hedge at Hollinhead Fold; in the hedge on the right hand side of the road from Longridge to Chipping, just beyond the bridge over the Loud; in Rib Lane, Longridge.

——— *nigrum*, Linn.—In a corner of a field near Ribbleton Moor, on the side nearest the cemetery.

Chenopodium maritimum, Linn.—Abundantly on Ashton Marsh, and in many places from thence to Lytham.

Scandix Pecten, Linn.—Corn fields near Poulton-le-Fylde.

Sium inundatum, Wigg.—Lane leading from Stainall to Stalmine, Mr. Pearson; Whinny Lane, Euxton, Mr. H. Scott.

Œnanthe crocata, Linn.—In a ditch by the side of the lane from Avenham to Walton; in ditches by the road to Wood Plumpton; plentifully in a ditch at Grimsargh, on the road to Longridge; in several other places near Preston; in great abundance in many places between Rufford and Marton Mere.

Apium graveolens, Linn.—Between Greaves' Town and Ashton Marsh; banks of the Wyre, abundantly, from Skippool and Rawcliffe Marsh to the sea.

Angelica sylvestris, Linn.—Frequent in moist woods and by the sides of streams; between the tramroad and Penwortham bridge, on the south side of the Ribble; Cuerden woods, near the footpath from Clayton Green to Leyland.

Bupleurum rotundifolium, Linn.—Mr. H. Scott says that he has been informed by Mr. George Ward, a gardener at Feniscowles, that he has found this plant in that neighbourhood.

Pastinaca sativa, Linn.—Very abundantly on copse at Bispham near Blackpool.

Statice reticulata, Hook.—Plentifully on the marshes between Skippool and Fleetwood, and between Wardless and Fleetwood.

——— *Limonium*, Linn.—Very abundant in the same localities as the last.

Linum perenne, Linn.—Very sparingly in a stubble field at Stalmine, 1851, Mr. Pearson.

——— *usitatissimum*, Lum.—In a field at Linguet, near Garstang, Mr. Pearson.

Galanthus nivalis, Linn.—Plentifully in Seed Park at Samlesbury, and in several places by the side of the Bezza brook in that township. Mr. Pearson informs me that it grows under hedges at St. Michael's, Rawcliffe, and Stalmine; on hedge banks beyond Broughton, on the left hand side of the road to Lancaster.

Narcissus Pseudo—Narcissus, Linn.—Meadow near St. Michael's Hall; meadow at Stalmine, Mr. Pearson.

Fritillaria Meleagris, Linn.—Abundantly in a meadow at Stainall, at present in the occupation of Mr. John Hastewell.

Juncus maritimus, Sm..—Frequent by the side of the Wyre at the Shard, Wardless, and other places in that neighbourhood.

Luzula congesta, Sm.—Valley at Nickey Nook; by the side of the road near Beacon Fell; fields at the back of the factory, Roach Bridge.

Rumex maritimus, Linn.—Occasionally between the Naze Point and Lytham.

———*Hydrolapathum*, Huds.—Bank bridge in Tarleton, Mr. H. Scott.

Alisma ranunculoides, Linn.—Canal near Garstang, plentifully, Mr. Pearson.

Epilobium angustifolium, Linn.—Farington Moss, near the railway, sparingly.

Chlora perfoliata, Linn.—Wyre bank between Skippool and Wardless, Mr. Pearson.

Vaccinium vitis-idæa, Linn.—Anglezark Moor; Longridge Fell, on the further side of the road leading from White Cross to Jeffrey Hill, abundantly.

Butomus umbellatus, Linn.—Canal side in several places at Rufford.

Saxifraga tridactylites, Linn.—By the road side, within forty yards of Ashton Church, Mr. Lawrence Lucas. I have not found it nearer to Preston than Overton, near Glasson Dock, where it grows abundantly on walls.

Saxifraga umbrosa, Linn.—I believe this should be *Saxifraga hirsuta*.

Stellaria glauca, With.—Brook side between the tram road and Walton.

Arenaria rubra, Linn.—Plentifully between the road and the canal at Rufford.

Sedum Anglicum, Huds.—Plentifully on a bank at Sunderland, by the side of a lane leading from the ferry-house to the sea.

Agrostemma Githago, Linn.—In a corn field on the south side of Rufford Park; corn fields between Poulton and Bispham. Mr. Pearson says it grows amongst corn at St. Michael's, Rawcliffe, Stalmine, and Garstang.

Asarum Europæum, Linn.—Mr. Pearson says he has been informed that this plant is found in Barton.

Prunus Padus, Linn.—In Penwortham, by the side of a road leading from the tramroad under the East Lancashire Railway.

Pyrus communis, Linn.—In a hedge at Stainall, on the road to Stalmine.

Rosa Sabini, Woods.—I am not quite certain as to the correctness of this name.

Chelidonium majus, Linn.—Plentiful on a ditch side in Longmore Lane, near Garstang, Mr. Pearson; garden hedge at Fishwick, near Preston; occasionally near Rufford.

Glaucium luteum, Scop.—Occasionally between Wardless and Fleetwood.

Thalictrum minus, Linn.—Beach at Lytham.

——— *flavum*, Linn.—Croston Meadows; by the side of a water course between Rufford and Marton Mere.

Clematis vitalba, Linn.—Stated in Part I. to grow about Clitheroe: this is an error.

Ranunculus auricomus, Linn.—Watery Lane, Fishwick; lane beyond Many Brooks, Moon's Mill.

Trollius Europæus, Linn.—Near the Liverpool water-works in Heath Charnock; Plymouth bridge, Chorley.

Verbena officinalis, Linn.—By the road side at Wood Plumpton, opposite the church.

Mentha piperita, Sm.—Plentifully in a ditch in Howick, on the right hand side of the road to Liverpool, and also in the lane leading from Hutton Hall to the Liverpool road.

——— *rotundifolia* Linn.—Near Chorley, Dr. John Morris Rigby, Chorley.

——— *aquatica*, Linn.—Near Chorley, Dr. Rigby.

Lamium incisum, Willd.—Between the tramroad bridge and Walton Hall gardens; a weed in the garden of the Saddle Inn in Lea; occasionally about Rufford.

——— *amplexicaule*, Linn.—Between the tramroad bridge and Walton, occasionally; by the side of the road, and on a wall between the church at Rufford and the Hesketh Arms Inn; amongst corn at Garstang, Mr. Pearson.

——— *maculatum*, Linn.—Occasionally a weed in gardens at Rawcliffe, Mr. Pearson.

Stachys arvensis, Linn.—Corn fields at Rufford, on the south side of the park.

Scutellaria galericulata, Linn.—In several places by the side of the road between Howick and Longton; ditches at Stalmine; canal near Greenhalgh Castle, Mr. Pearson.

——— *minor*, Linn.—In Anglezark, on Winstanley's farm.

Bartsia viscosa, Linn.—Field at Lytham, at the back of the sand hills.

Draba verna, Linn.—In many places near Rufford, on sandy soil.

Arabis hirsuta, Br.—By the road side, near Ridding Hey, Clitheroe.

Brassica Monensis, Br.—On the Beach at Lytham, near the sand hills; marsh below Preesall.

Sinapis nigra, Linn.—In corn fields occasionally; plentifully in a corn field between Poulton and Bispham.

Geranium phæum, Linn.—In a meadow at St. Michael's Hall, orchard at same place, Mr. Pearson.

——— *lucidum*, Linn. Abundant on the rocks forming the west side of Clitheroe Castle Hill.

Malva moschata, Linn.—In several places on the coast between Sunderland and Heysham; in a lane at Overton; banks of the Wyre near Wardlees; and on a brook side, about half a mile behind St. Michael's Hall, on the moss, Mr. Pearson; Common Bank, Preston, some years since, Mr. Lucas.

——— *rotundifolia*, Linn.—On the banks of the Wyre; at St. Michael's and Rawcliffe, Mr. Pearson.

Fumaria capreolata, Linn.—Preston Cemetery; hedges about Leyland; hedges by the side of the road from Lytham to Blackpool, just beyond the entrance to Lytham Hall.

Corydalis lutea, Lind.—A weed in a garden at Garstang, Mr. Pearson. On a wall at Whalley Abbey, Dr. Rigby.

Corydalis claviculata, D. C.—Not unfrequent on dry banks, and among stones near the Nab Wood, Chorley.

Trifolium suffocatum, Linn.—Beach at Lytham.

——— *medium*, Linn.—In bushy places occasionally; near the Drumhead in Walton; frequently in hedges between Poulton and Bispham.

——— *arvense*, Linn.—Beach at Lytham.

——— *fragiferum*, Linn.—Very abundant in many places between the Naze Point and Lytham.

Medicago minima, Linn.—This is an error.

——— *lupulina*, Linn.—By the side of the tram-road; road side between Walton and Bamber Bridge; and in many other similar places near Preston.

Hypericum Androsæmum, Linn.—Valley near Nickey Nook; in a ravine above the ruins of Greenhalgh Castle, Mr. Pearson; plentiful in Euxton, Mr. H. Scott.

——— *humifusum*, Linn.—Dry banks, Dimples lane, Garstang; in similar situations about Stalmine, Mr. Pearson.

Tragopogon porrifolius, Linn.—Near the canal bridge, Garstang; a few plants in 1851, Mr. Pearson.

Carduus acanthoides, Linn.—On hedge banks near Glasson Dock; banks near Cockersand Abbey.

——— *tenuiflorus*, Curt.—On banks at Bispham, near Blackpool.

Cnicus heterophyllus, Willd.—Mr. John Bibby of Preston informs me that some years since he found this plant plentifully in corn fields, by the side of the Ribble beyond Red Scar. I have this year (1859), searched the locality with him, but without success.

Bidens cernua, Linn.—At the edge of a pit, by the side of Toad Lane, Preston; by the side of the road from Penwortham to Longton.

——— *tripartita*, Linn.—In wet places among the coal yards at Preston.

Tanacetum vulgare, Linn.—Plentifully by the side of the Ribble, in Samlesbury, near the Bezza Brook.

Artemisia maritima, Linn.—Stainall marsh to the sea, Mr. Pearson.

Conyza squarrosa, Linn.—Frequently among the sand hills near Lytham.

Senecio Saracenicus, Linn.—By the river side in the field next beyond the Nab Wood at Red Scar plentifully.

Orchis viridis, Sm.—Field behind the factory at Roach Bridge, Mr. Lucas.

Gymnadenia conopsea, Br.—In the same locality as the last, Mr. Lucas.

Ophrys muscifera, Huds.—In the same locality as the last two, Mr. Lucas.

——— *apifera*, Huds.—On the Drumhead estate in Walton, Mr. Lucas. Several other persons have also told me that this plant grows in the locality named. One person who has been in the habit of gathering

it there says he has not seen it for four seasons, and on searching for it this year, at my request, could not find a single specimen.

Epipactis latifolia, Sm.—In a ravine about three quarters of a mile above Greenhalgh Castle; in a thicket on the way from Garstang to Nickey Nook; a single plant in Leathercoat Wood, Mr. Pearson.

Aristolochia Clematitis, Linn.—Field at Warton on the right hand side of the road to Lytham, Mr. Lucas.

Typha latifolia, Linn.—Pits and Ditches at Rawcliffe, St. Michael's, and Stalmine, Mr. Pearson.

—— *angustifolia*, Linn.—Rawcliffe moss, Mr. Pearson. The habitat given in Part I. should have been "Marton" instead of "Martin" Mere.

Carex sylvatica, Huds.—Plentifully in the Tunbrook Wood, and also in Melling's Wood.

—— *stellulata*, Good.—Marshy place by the side of the road from the Derby Arms to Beacon Fell; ditches and pools near the Wyre, at Preesall, Stainall and Stalmine.

—— *extensa*, Good.—I have been mistaken as to this plant. The plant I took to be "*Carex extensa*," I have sent to the Botanical Society at Todmorden, and it has been returned to me with the name "*Carex Œderi*."

—— *Œderi*, Ehrh.—Ribbleton Moor, plentifully; valley at Nickey Nook.

—— *intermedia*, Good.—By the side of the canal above Preston, occasionally; between the Naze Point and Lytham.

Bryonia dioica, Jacq.—Hedge at Wildboar, St. Michael's, Mr. Pearson; Town Green, Chorley, Mr. H. Scott.

Tamus communis, Linn.—In the Tunbrook Wood.

Hydrocharis Morsus ranæ, Linn.—Abundantly in ditches near the foot-path from Cockerham Church to the sea.

Atriplex portulacoides, Linn.—In great abundance in the marshes between Skippool and the sea.

—— *laciniata*, Linn.—Occasionally between the Naze Point and Lytham.

—— *littoralis*, Linn.—Frequent between Stena and Fleetwood. Mr. Pearson says he has found it upon Rawcliffe and Hambleton marshes.

Aspidium angulare, Willd.—Plentiful in the hedge between Garstang and Bowgrave, Mr. Pearson; Nab Wood, Chorley

—— *Oreopteris*, Sw.—Very large and abundant in a ravine above Greenhalgh Castle, Mr. Pearson.

Osmunda regalis, Linn.—Nateby Moss, near Bowers's House; also on Winmarley Moss, Mr. Pearson; Croston Moss.

Botrychium Lunaria, Sw.—Mr. Henry Oakey, of Preston, informs me that he has had specimens of this plant given him, which grew in a field on the coast at Norbreck; plentifully on Moors in Wheelton.

Equisetum sylvaticum, Linn.—By the side of the footpath, near the Fell from Longridge to Chipping.

Grammitis Ceterach, Swartz.—On a wall at Whittle, on the left hand side of the road, leading from the Navigation Inn to Mr. Aitken's print works.

Allosorus crispus, Bernh.—Rivington Pike, Dr. Rigby.

Asplenium Adiantum nigrum, Linn.—Sparingly on a Hazel Bank near Skippool; on the banks of the Wyre, Mr. Pearson.

Lastrea fœniscecii, Watson.—In Grimeford Lane, near Chorley, Dr. Rigby.

Cystopteris fragilis, Bernh.—On a wall at White Coppice, Heapy.

ON THE ENGRAVED PORTRAITS AND PRETENDED PORTRAITS OF MILTON.

By John Fitchett Marsh, Esq.

READ 3RD MAY, 1860.

While volumes have been written on the portraits of Shakespeare, the information obtainable respecting those of Milton is confined to a few scattered notes of his biographers and commentators, the most copious account being one in Todd's Life, copied, with some additions, from Mr. Warton's note to Milton's Greek epigram, "In effigiei ejus sculptorem." The reason for this scarcity of information is not that less is known of the portraits of our greatest epic, than of those of our greatest dramatic poet, but that, on the contrary, more being known, less has been left to conjecture; but, unfortunately, the existing materials have been so used by successive commentators—each adopting and adding to the mistakes of his predecessors—as to produce an amount of confusion from which it is my hope to assist in extricating the subject. The objects I propose to myself in the present paper are, to examine the relation in which the usually received portraits stand to each other, to collect the scattered notices of them, and thus to render them available for the illustration of a connected series of representations of the poet's features. It is of ENGRAVED PORTRAITS only that I propose to treat, having no opportunities for making myself acquainted with the original pictures and drawings. The extent of the materials for a catalogue is greater than perhaps would be generally supposed: for while Granger's list comprises 37 portraits, Bromley's only 25, and Evans's 42, I have been enabled not only to compile a catalogue of 164, but to produce upwards of 150 for your inspection.

The portrait painted at the age of ten, now in the possession of Mr. Disney; that at the age of twenty-one, purchased from the executor of Milton's widow by Speaker Onslow; the print engraved by Marshal, for the first edition of the minor poems, in 1645; and that prefixed to the

first edition of the History of Britain, inscribed "Gul. Faithorne ad vivum "delin. et sculpsit, 1670," at the age of 62, form a series of unquestionable authenticity, taken at various periods of the Poet's life, and presenting such marked difference of feature as to create no risk of mistake or confusion among them. Their peculiarities and history will be more fitly noticed when we come to describe them in detail; but the name of Faithorne has been so unwarrantably mixed up with the mistakes and falsifications which I shall presently have to expose, that it will be convenient, before proceeding further, to describe the characteristics by which his celebrated engraving, and the large number of portraits derived from it, may be distinguished. If, in doing this, I say little about expression and features, it is because they are more easily conveyed to the mind by actual inspection than described by words, and because the caprice or incompetence of engravers may readily produce such a variation in them as effectually to disguise the source from which their subject has been derived; whereas peculiarities of dress and attitude, though in some respects secondary considerations, are usually found so persistently preserved as to furnish satisfactory evidence of a common origin. The Faithorne engraving, then, may be distinguished by the following characteristics:—The face is turned in the same direction as the bust. There is a broad Genevan band,* the nearer half of which lies quite straight, and the other half falls in several folds, beneath which is seen a tassel.

* As we shall have to mention the distinguishing costumes of the various portraits, it will be well to explain the sense in which several terms are used, especially as the name of the modern academic badge connects the idea of "bands", in popular estimation, rather with the Genevan band here referred to than with the article of dress to which the term "band" was originally applied. The circular ruff, with its ample plaits, is familiar to us in the portraits of Queen Elizabeth's courtiers. In the succeeding reign (*see Planché on British Costume, ed.* 1847, p. 350), "the *ruff* was occasionally "exchanged for a wide stiff collar, standing out horizontally and squarely, made of the "same stuff, and starched and wired as usual, but plain instead of plaited or pinched, "and sometimes edged, like the ruff, with lace: these collars were called 'Bands'"—from which comes the term "band-box"—and Fairholt in the Glossary to his History of Costume defines the BAND as "a collar of linen or cambric, surrounding the neck, "and which was stiffened with starch, or underpropped; or else allowed to fall upon the "shoulders, when it was termed a 'falling-band'." The Janssen portrait and that described in the Gent. Mag. so closely resembling it (No. 4) furnish excellent illustrations of the "band" and "falling-band" respectively: it is an error to confound either one or the other with the "ruff." Deprived of their laced edges—the sides cut away that they might not fall over the shoulder—and the parts overhanging the chest cut square—the transition is easy from the "falling-bands" to the "Geneva bands," which, Mr. Planché observes, are "like those worn by our modern clergymen and councillors, "except that instead of being two small pieces worn for distinction merely, they were "bona fide collars, the ends of which hung negligently out over the waistcoat." (p. 390.) For a fair specimen of the transition here spoken of see the print numbered 151.

The drapery, which falls so as to cover the vest except the two upper buttons, is drawn rather tight over the nearer shoulder. A thick fold, a little below, takes a direction more nearly approaching the horizontal; and below that, the edge or a thin fold of the material takes a peculiar curve from one side of the figure to the other.

Leaving these distinctive marks to be borne in mind when we come to compare the portraits with which this original has been confounded, I will proceed to notice the circumstances from which the confusion I refer to has arisen. Several applications seem to have been made to Deborah Clarke, Milton's youngest daughter, who survived him until the year 1727, for her opinion on the authenticity of supposed portraits of her father. The first is related in a letter from Vertue to Mr. Christian, the seal engraver, preserved in the British Museum,* and is as follows: "Mr. Christian—Pray inform my Lord Harley † that I have on Thursday "last seen the Daughter of Milton the Poet. I carry'd with me two or "three different Prints of Milton's picture which she immediately knew to "be like her father & told me her mother in Law (if ‡ living in Cheshire) "had two pictures of him, one when he was a school boy & the other when "about § twenty. She knows of no other picture of him because she was "several years in Ireland—both before & after his Death. She was the "youngest of Milton's daughters by his first wife and was taught to read "to her father several Languages. Mr. Addison was desirous to see her "once—& desired she would bring with her Testimonials of her being "Milton's daughter. But as soon as she came into the Room he told her "she needed none, her face haveing much of the likeness of the pictures "he had seen of him. For my part I find the features of her Face very

* This letter has been printed in the Gent. Mag. (1831); in the Memoirs of Thomas Hollis; and in Ivimey's and Masson's Biographies, and perhaps elsewhere. In some of these the reference is to *Harl. MSS.* 7003, *f.* 176, and in others to *Add. MSS.* 5016*, *f.* 71. The fact is that the former is the original letter, and the latter a transcript of it in the handwriting of Dr. Birch, which, though nearly accurate, has, from its not being quite so legible as the original, led to inaccuracies in subsequent copies. Having stumbled on this fact at the Museum, I took the trouble of collating the two manuscripts; and the letter in the text is a literatim copy of the original.

† Lord Henley. (*Ivimey's Life of Milton*, *p.* 329.)

‡ The "if" is omitted in Birch's copy. Vertue had originally written "is," but altered it with the pen. The doubt expressed, though immaterial to our present purpose, is confirmatory of observations I have made elsewhere on the indifference with which Milton's widow was spoken of by his family.

§ "Above" in Birch's copy.

"much like the Prints. I showd her the Painting I have to engrave "which she believes not to be her Father's picture, it being of a Brown "complexion & black hair & curled locks—on the contrary he was of a "fair complexion a little red in his cheeks & light brown lanck hair. I "desire you woud acquaint Mr. Prior I was so unfortunate to wait on him "on Thursday morning last just after he was gone out of Town—it was "with * this intent, to enquire of him if he remembers a picture of Milton "in the late Lord Dorsett's collection—as I am told this † was—or if he "can inform me how I shall enquire or know the truth of this affair. I "shoud be much obliged to him—being very willing to have all certainty "on that account before I begin to engrave the Plate—that it may be the "more satisfactory to the Publick as well as to my self. The sooner you "can communicate this the better—because I have to resolve which "I cant well do till I have an answer, which will much oblige, Your "Friend to command, Geo. Vertue. Saturday, Aug. 12, 1721. To Mr. "Charles Christian."

The elder Richardson, in his "Explanatory Notes and Remarks on "Milton's 'Paradise Lost,'" published in 1734, inserted an etching "from "an excellent original in crayons," in his possession, and which he states in his introduction (p. ii.) he had reason to believe Milton sat for not long before his death. In a subsequent passage (p. xxxvi.) he relates, as an evidence of Deborah Clarke's tender remembrance of her father, that "this picture in crayons was shewn her after several others, or which were "pretended to be his. When those were shewn, and she was asked if she "could recollect if she had ever seen such a face, 'No, no'; but when this "was produced,—in a transport—'Tis my father—'tis my dear father— "I see him—'tis him;' and then she put her hands to several parts of her "face—'Tis the very man—here—here.'"

In the "Memoirs of Thomas Hollis," edited in 1780 by Archdeacon Blackburne, is inserted a print drawn and etched by Cipriani, from a portrait in crayons in the possession of Messrs. Tonson, which, at p. 619, is described as "a drawing in crayons by William Faithorne, now in the

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* "With" omitted in Birch's copy.

† "As I am told *there* was" (*Ivimey's Life of Milton*, p. 329.) The difference in the sense is considerable; but the history of a portrait which turned out not to represent Milton is unimportant, except so far as it bears on the discussion respecting the Cooper miniature, to be mentioned hereafter.

"hands of Messrs. Tonson, booksellers, in London;" and it is related that "about the year 1725 Mr. George Vertue, a worthy and eminent "British antiquary, went on purpose to see Mrs. Deborah Clarke, Milton's "youngest and favorite daughter, and some time his amanuensis, who then "lodged in a mean little street near Moorfields, where she kept a school "for children for her support. He took this drawing with him, and divers "paintings said to be of Milton, all which were brought into the room "by his contrivance, as if by accident, whilst he conversed with her. She "took no notice of the paintings; but when she perceived the drawing she "cried out, 'O Lord! that is the picture of my father—how came you by "it?' And, stroaking the hair of her forehead, added 'Just so my father "wore his hair.' This daughter resembled Milton greatly."

There is no excuse for confounding the first of these three alleged visits to Deborah Clarke—when, after confirming the authenticity of several prints produced by Vertue, she condemned a painting which it was the special object of his visit to shew her—with the interview related by Richardson, when his crayon drawing was shewn her by some person unnamed, and recognized with apparent emotion after she had failed to recognize the likeness of others. The third interview, as related in Hollis's Memoirs, is full of inconsistencies, which it will be more convenient to notice in another place. What I here wish to observe is, that Hollis's biographer, in alluding to Tonson's crayon drawing attributed to Faithorne, in no manner connects it with Richardson's; nor does Richardson attribute his own crayon drawing to Faithorne, or mention Vertue as the person who shewed it to Deborah Clarke. In fact, though Cipriani's pencil has taken sad liberties with the expression, the Tonson drawing, as represented by him, has the attitude and costume identifying it with the Faithorne engraving: and is likely enough to have been Faithorne's original drawing in crayons—a mode of execution he is known to have adopted. (*See Walpole's Catalogue of Engravers, 1st ed., p.* 58.) With Richardson's etching it has no one point of identity. In the latter the countenance is more upturned than in Faithorne's engraving; and the position of the head is such that the left shoulder and right cheek are nearest to the spectator; the collar, not at all partaking of any of the forms of a band, has the ends separating from each other at something less than a right angle, with cord and tassels between, the sides also approaching to straight lines; and the drapery falls from both shoulders so

as to form an angle a little to the right of the buttons, of which a row of five is exposed. But notwithstanding these marked distinctions, or rather this total absence of any point of similarity, the mention of two crayon drawings in connection with visits to Milton's daughter has led to a series of mistakes. Bishop Newton, at p. lvi. of his life of Milton (*Baskerville edition*, 1759), in a short notice containing another glaring mistake which I need not stop to point out, confounds them by speaking of the "portrait "in crayons, drawn when Milton was about sixty-two, and which was "in the collection of Mr. Richardson, but has since been purchased by "Mr. Tonson." This may be *literally* true; for Richardson's drawing, as well as the other, may have eventually come into the possession of Tonson: but the statement is not the less calculated to mislead. Accordingly Warton gets deeper into the error, for he not only states, in his note at p. 530 (ed. 1791), that Faithorne's original engraving, which he had stated in the preceding page to be from a drawing in crayons, "was copied by "Vertue, one of his chief works, in 1725," (though I shall endeavour to shew presently that Vertue's portrait of that date had a common origin with Richardson's etching, and little in common with Faithorne,) but in the following page he states that "the Richardsons, and next the Tonsons, "had the admirable crayon drawing above mentioned, done by Faithorne, "the best likeness extant, and for which Milton sate at the age of "sixty-two;" and after quoting, in relation to the same drawing, the interview between Vertue and Deborah Clarke, as told in Hollis's memoirs, adds, "This head by Faithorne was etched by Richardson, the father, about "1734, with the addition of a laurel crown to help the propriety of the "motto." Symmons repeats the error (pp. 515, 531, 1st ed.): and to make confusion worse confounded, Todd adopts verbatim the language of Warton, but adds that the drawing successively in the possession of Richardson and Tonson was then in the possession of Mr. Baker, who had allowed an engraving to be made from it for Todd's work. On turning, however, to the engraving last referred to, we find it to be without one point of identity with Faithorne or Cipriani's portraits, but with such marks of a common origin with Richardson's as I shall presently explain. Lastly, Mr. Cunningham, in a note to his edition of Johnson's "Lives of "the Poets" (I. 131), says—"The best portrait of Milton is that drawn "and engraved by Faithorne, prefixed to Milton's 'History of Britain,' "1670, 4to: Faithorne's original drawing is preserved, with other portraits

"belonging to Tonson, including the Kit-kat collection, at Bayfordbury, "near Hertford, the seat of Mr. Baker." I should create additional confusion if I were to go on repeating these statements in the language of successive commentators; but the errors of all of them are so completely condensed in a paragraph of a dozen lines by Mr. Keightley, that I may as well quote it:—"In 1670," he says, "was a portrait engraved by "Faithorne, *from a crayon drawing* by himself, with this legend, 'Gul. "'Faithorne ad vivum delin. et sculpsit. Johannis Miltoni effigies. "'Ætat. 62. 1670.' This engraving has been often copied, [he adds in "a footnote, "there is one by Cipriani in Hollis's Memoirs,"] but as it was "not in Faithorne's best manner, *a new copy* was made for the first edition "of Todd's Milton, from *the original crayon drawing in the possession of* "*William Baker, Esq.* This drawing had passed through the hands of "*the Richardsons and Tonsons* to those of *Mr. Baker.* It was at the "sight *of this*, when shewn to her by Vertue, the engraver, among other "paintings and engravings, that Deborah Clarke made the exclamation "above related. All the best portraits of Milton are taken from it." (*Keightley's Life of Milton, p.* 132.) I have seen none of the drawings: but if the slightest reliance is to be placed upon the engravings, a glance at those published by Richardson, from the crayon drawing in his possession—by Hollis, from the crayon drawing in the possession of the Tonsons (and likely enough, as I have stated, to have been Faithorne's original drawing)—and by Todd, from the drawing in the possession of Mr. Baker, would have shewn how distinct each was from the other, whatever of common origin there may have been between the first and third. It seems to me a most extraordinary fact, that a careless statement of Bishop Newton, upwards of a century ago, so far from being detected, should have gone on accumulating error as it passed through successive hands until the present time, without one of the gentlemen quoted thinking it necessary to compare the published portraits which they thus hastily assumed to have been engraved from a common original. In one instance it is curious to watch the effect of the mistake while two disputants are playing at cross purposes on the subject. In the discussion to which I shall have to make more particular reference in speaking of the Cooper miniature, and in which Sir Joshua Reynolds, under the signature of "R. J.," discussed with Lord Hailes its pretensions to be accepted as a portrait of Milton, the former writes (*Gent. Mag.*, LXI, 603):—"In regard to the drop serene we

"can assure your correspondent that it is not visible in the miniature, and "that he is mistaken in saying that it is visible in the crayon picture by "Faithorne." Lord Hailes replies (p. 886) with sarcastic ingenuity:—"It "is said that the gutta serena, or rather its consequence, is not visible in "Faithorne's drawing of Milton. I never saw it; but I supposed that it "represented Milton as blind, because Richardson's etching represented "him so: and if Richardson has misled me, I must regret that I put my "trust in a painter and connoisseur." The explanation is obvious. Reynolds, whether speaking from a knowledge of the crayon drawing in the possession of the Tonsons, from Cipriani's copy from it, or from Faithorne's engraving, was justified in describing it as giving no indication of Milton's blindness; whereas Hailes, imagining that he was speaking of the same drawing, had reference to Richardson's etching from another, one of the special merits of which was its rendering of the peculiar expression arising from the gutta serena, on which subject some observations of Richardson are quoted below.

What, then, was the "excellent original in crayons" from which Richardson made his etching in 1734, and which was recognized by Deborah Clarke as so striking a likeness of her father? In considering this question I have been led to attach an unexpected degree of importance to a folio mezzotint, inscribed "R. White ad vivum delin. J. Simon fecit," the precise date of which I have been unable to ascertain. I am told it is a rare print, though I find it marked at a trifling price in Evans's catalogue, but I was not aware of its rarity until after I had discovered its importance. I have seen no copy except my own. There is none in the British Museum; and it is not mentioned either in Granger or Bromley. Bryan, also, in his Dictionary of Painters and Engravers, fails to particularize it among Simon's works; but his editor, Stanley, mentions Milton's among the heads engraved by that artist. What I here wish particularly to remark, with reference to this portrait, is its exact correspondence with Richardson's etching of 1734. The former continues the drapery lower down the figure, so as, in fact, to constitute a half length; but with this exception, and the wholly unimportant one of the portrait being reversed, every word of the description I have given of Richardson's etching is precisely applicable to Simon's mezzotint. The laureate wreath, however, with which, in both, the head is encircled, and which at first seemed one of the most satisfactory points of identity, presents a difficulty: the elucida-

tion of it will depend in a great measure on the date of Simon's print, which I have not yet been able to ascertain. Richardson expressly says (p. ii.):—"The laurel wreath is not in the picture; the two lines under it "are my reason for putting it there—not what otherwise would be "imagined: all the world has given it him long since." The presence of the laurel wreath in both prints cannot be explained away as a coincidence: for leaf by leaf, with the exception of a single leaf inserted in Simon's (the highest of the further branch), but omitted in Richardson's, the one wreath is a servile copy of the other. If, then, Simon's mezzotint was published previous to 1734, how comes it that Richardson, thus proved to have been familiar with it, avoids all allusion to it, asserts the wreath to be his own idea, and does not attribute the "excellent original," which he says he "has reason to believe Milton sate for not long before his death," either to Robert White or to any other artist by name? If Simon's print was published subsequent to 1734, the identity of the wreaths proves *him* to have been the copyist; and if so, on what evidence did he inscribe his print with "R. White ad vivum delineavit?" These questions I am compelled to leave unanswered. Internal evidence would tend to the conclusion that Simon's had priority in date, from the fact that the continuation of the folds, as above noticed, accounts for the direction of the lines of drapery in Richardson's etching, which are otherwise unmeaning. The truth is worth arriving at, if possible.* The result would probably affect the question whether there is good ground for retaining the name of White as the original artist, as I have ventured to do below for distinction's sake: but it would leave untouched the fact that the two prints had a common origin in a portrait, the veracity of which was confirmed by the best authority—that of Milton's daughter.

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* The only clue I am aware of is the names of the two firms of publishers—"sold "by T. Bowles in Paul's Church-yard and J. Bowles in Cornhill." The period during which these two firms existed contemporaneously might possibly be ascertained; but it would only enable us to ascertain the minimum antiquity of the print; for one of our most eminent printsellers tells me he has an impression of having seen it with an earlier imprint than that of the firms of Bowles. The date of 1738 is assigned by Bromley to a folio mezzotint of Pope by J. Faber, from a picture painted by Kneller in 1721, which is stated to be "printed for Thos. Bowles in St. Paul's Churchyard, and John Bowles "*and Son* at the Black Horse in Cornhill." Simon's folio mezzotint of Shakespeare, from a picture attributed to Zoust, is supposed by Boaden and Wivell to have been published in or about 1725; and his folio mezzotint of Pope, from a painting by Dahl, is dated by Bromley 1728; but the first was by another publisher, and the second has no publisher's name. Bowles of the Black Horse is repeatedly mentioned in connection with the life of Hogarth; see the papers in the first vol. of the Cornhill Magazine.

I consider the same original to have been the source from which, with more or less artistic license, were derived Vertue's celebrated head of 1725; I. Vandergucht's folio; another engraving by Vertue, greatly altered in expression and costume, in 1750; and lastly, an engraving by Miller, inserted in an edition of Newton's Milton, published by the Tonsons in 1759, and of which I consider the original is likely enough to have been the drawing which passed from the possession of the Tonsons to Mr. Baker, as stated by Todd and Cunningham, or at least another drawing from the same original. All these portraits will be duly described below, and treated (to borrow a phrase from physical science) as *typical forms*, in connection with which I have thought it desirable to arrange the various prints to which they have respectively given rise. That all these are trustworthy representations of our great poet I am far from asserting. On the contrary, the extent to which various engravers have departed from the originals they professed to copy is absurd enough; but I have treated them as authentic to this extent, that their origin can be traced directly or remotely to portraits the history of which is satisfactorily shewn, or which have been vouched by the family of the poet.

To these succeed the prints which have been derived from monuments, busts and seals. There remain a remarkable variety of portraits, which have been published with the name of Milton, some of which may be—others cannot possibly be—and none, in my opinion, are satisfactorily proved to be from pictures intended to represent him. The history of these portraits, or pretended portraits, will more conveniently be noticed when we come to describe them; and I will now proceed with my catalogue in the order I have indicated.

Janssen's Portrait.

The name of this artist has been given by common consent—though I know not on what authority, prior to that of Cipriani, except the judgment of connoisseurs—to the picture referred to by Aubrey, in his notes written shortly after Milton's death (*p.* 337 *in Godwin's reprint*):—"A° D^ni^ 1619 "he was ten yeares old as by his picture and was then a poet: his school "master then was a Puritan in Essex who cutt his haire short," that is not his own hair, but the hair of his pupil, as explained by Professor Masson (p. 51, n.). It was one of the pictures which remained in the possession of Milton's widow until her death in 1727, and were enumerated

in the testamentary inventory of her effects, which I had the pleasure of bringing under the notice of the Historic Society in 1855. On the 3rd of June, 1760, it was purchased by Mr. Hollis, at the sale by auction of the effects of Mr. Charles Stanhope, who had mentioned to him, about two months before, that he had bought it of the executors of Milton's widow for twenty guineas. (*Memoirs of Thomas Hollis, p.* 95.) Warton mentions that the price at which it was purchased at Stanhope's sale was thirty-one guineas, and that Lord Harrington wishing to have the lot returned, Mr. Hollis replied that his lordship's whole estate should not repurchase it. (*Warton, p.* 530 *n., ed.* 1791.) It was this picture which Mr. Hollis was so careful to preserve on the occasion of his lodgings being on fire a few months subsequent to his purchase. The story is told in his memoirs, p. 106. The picture passed, with the other antiquities and curiosities collected by Mr. Hollis, to Mr. Thomas Brand Hollis, who left them by will to his friend Dr. Disney, and is now in the possession of his grandson, Edgar Disney, Esq., of the Hyde, near Ingatestone. It is described by Professor Masson as about twenty-seven inches by twenty in size, with the frame, the portrait set in a dark oval, and with the words "John Milton, ætatis suæ 10, Anno 1618" inscribed on the paint in contemporary characters, but no painter's name. This minuteness of description is important with reference to another portrait, to be mentioned shortly, which has been confounded with the present one. The first engraving from Mr. Disney's picture was that published in Hollis's memoirs:—

1. Iohn Milton. Drawn and etched MDCCLX by I. B. Cipriani, a Tuscan, from a picture painted by Cornelius Johnson MDCXVIII, now in the possession of Thomas Hollis, of Lincoln's Inne, F.R. and A.SS. Portrait enclosed in an oval wreath of roses; and below, as in all the prints engraved under the direction of the Hollises, their favorite device of the Cap of Liberty. (*See Dibdin's Lib. Com.* 555 n.) Subjoined are some lines from "Paradise Regained," which Professor Masson considers were really written by the poet with some reference to his own recollections of himself as a child:—

"When I was yet a child, no childish play
To me was pleasing," &c.

The print is mentioned in Granger and Bromley.

2. Iohn Milton. Ætat. 10. From an original picture in the collection of Thomas Brand Hollis, Esq., near the Hyde, Essex. Cornelius Jansen pinxit.

W. N. Gardiner sculp.; an oval, 6.2 × 5.9 * in plate, 9.8 × 6.7; published June 4, 1794, by John and Josiah Boydell and George Nicol, in the sumptuous edition of the Poetical Works, in 3 vols. royal folio, known as Boydell's Milton.

3. Milton. Ætat. 10. After a photograph from the original picture, in the possession of Edgar Disney, Esq., of the Hyde, Ingatestone, Essex; engraved by Edward Radclyffe; a beautiful line engraving, forming one of the illustrations to the first volume of Masson's Life of Milton.

4. Anon. An engraving almost in outline, forming an illustration to the "Gentleman's Magazine" (1787), vol. lvii, p. 759, in which is printed a letter signed "Z. Z.," dated from Oxford, and sending the drawing from which this is engraved, and which it states "a friend, who lives there, has obligingly suffered to be taken "from a picture in his possession. It is on wood. At top is 'A° 1623. Æt. suæ "'12.' In the hands of the figure is a book with 'Homer's Iliads' on the leaves. "The hair is red. This drawing is very like, only perhaps somewhat older than "the picture." A correspondent, at p. 892 of the same volume, points out the identity of the portrait with that engraved by Cipriani in Hollis's Memoirs—adds that the dates correspond (which, however, is not the case)—and signs his communication "Q. E. D." This is getting on rather too fast, for it is evident there were two portraits in existence; but though, in addition to the discrepancies apparent from the above notice, the sketchy outline of the print shews a marked difference in costume (the square-fronted erect band of Mr. Disney's portrait being replaced by a falling-band of similar pattern †), the resemblance in feature between the two portraits is too close to have been the result of accident. That a copy of the original picture should have been taken while it was in the possession either of Mrs. Milton, her executor, Mr. Stanhope, or Mr. Hollis, is improbable, and we are driven to the conjecture either that the painter of Mr. Disney's portrait (whether Janssen or some one else) was tainted with a mannerism which would deprive his pictures of all claim to individuality, or that, being employed to paint another portrait of the young scholar at the age of twelve he had made free use of his original picture. This supposition would still leave an error of at least two years unaccounted for, if the date 1623 be correctly printed in the "Gentleman's Maga- "zine," and I scarcely dare offer it even as a conjecture: but if it should turn out to be correct, it would follow that there may yet be in existence an almost unknown portrait of Milton, with better claims to authenticity than some which have had their pretensions more loudly asserted.

The Onslow Portrait.

By this name is known the other of the two portraits enumerated in the inventory of Mrs. Milton's effects. Warton (p. 530, ed. 1791) says, that

* The measurements are throughout in inches and tenths.

† See note on Ruffs and Bands, *ante*.

"by some it is suspected not to be a portrait of Milton." By whom suspected, or on what grounds, I know not. There are few portraits with a better authenticated pedigree. Its existence, in the custody of Mrs. Milton, was known to Aubrey, who wrote in 1681 (p. 337 of *Godwin's reprint*):—"His widowe has his picture drawne (very well and like) when "a Cambridge schollar: she has his picture when a Cambridge schollar, "which ought to be engraven; for the pictures before his bookes" [alluding to Marshal's in 1645 and Faithorne's in 1670] "are not at all like him:" and made a memorandum (p. 345,) to "write his name in red letters on "his picture with his widowe to preserve." In 1721 Deborah Clarke informed Vertue (see his letter above) that her mother-in law, if living, in Cheshire, had two pictures of him, one when he was a school-boy, and the other when he was about twenty. In 1731, only four years after Mrs. Milton's death, we find it in the possession of Mr. Speaker Onslow, and engraved by Vertue; and as late as 1794 it was stated in the inscription to the engraving in Boydell's Milton to be "in the possession of Lord "Onslow, at Clandon, in Surrey, purchased from the executor of Milton's "widow by Arthur Onslow, Esq., Speaker of the House of Commons, as "certified in his own handwriting on the back of the picture." It is mentioned by Professor Masson (vol. I, p. 278) that the picture is not now in the possession of the present Earl of Onslow. The information I have obtained as to its history since it left his lordship's custody and present place of deposit is such as I do not feel warranted in making public. It is much to be desired that this relic should find a permanent resting place beside the Chandos Shakespeare in the National Portrait Gallery. It seems to have been known to Warton, who observes that "the picture "is handsomer than the engravings, and that the ruff is much in the neat "style of painting ruffs about and before 1628." The engravings from it are numerous:—

5. Joannes Milton. Æt. 21. Vertue, sc. Ex pictura archetypa quæ penes est præhonorabilem Arthurum Onslow, Arm: Vertue sc. 1731. 4to. I extract this description from Granger, having been unlucky in not meeting with a copy. He mentions that it differs from the next described only in the inscription. Bromley also mentions it.

6. Ioannes Milton. Ætatis XXI. G. Vertue sculp. 1731; in a square panel, with ornamented top, surmounting and partly concealing the top and sides of an oval. The name and age are on two ribands below, between which is a circular escutcheon charged with a single-headed eagle (in which Vertue's heraldic know-

ledge was at fault, for the eagle borne by Milton was double-headed, as proved by his two seals *), and beneath is a pedestal, on the two ends of which stand busts of Homer and Virgil; and on the front is inscribed "Nascuntur Poetæ, non fiunt." Published in Bentley's edition of "Paradise Lost," 4to, London, 1732. Mentioned in Granger and Bromley.

7. The same plate, with Dryden's lines substituted for the "Nascuntur Poetæ, "non fiunt," and the date badly altered from 1731 to 1747, is prefixed to Newton's edition of "Paradise Lost," 2 vols. 4to, London, 1749, which Hollis's biographer (see p. 117) supposed to be the original condition of the plate.

8. Ioannes Milton. Ætatis suæ 21. G. Vertue sculp. An oval, with slight scroll ornament at top, and below a riband, with name and age, above a plinth; size of plate 6 × 3.8; published in Newton's edition of "Paradise Regained," 8vo. London, 1773; mentioned by Granger and Bromley.

9. John Milton. In the collection of the Right Hon. Arthur Onslow, Esq. Speaker of the House of Common. I. Houbraken sculps. Amst. 1741. Impensis I. & P. Knapton, London, 1741. An oval, representing masonry, inscribed with name; at foot a pedestal; and in front of it ornaments consisting of a lyre surmounted by cherub head, a book, serpent with apple, &c.; size of plate 14.2 × 8.9. One of the series of folio plates known as Houbraken's heads; mentioned by Granger and Bromley.

10. Joannes Milton, Ætatis XXI. Andrew Miller fecit, Dublin, 1744; a copy of the last in mezzotint, including the ornaments, but reversed; and on the pedestal the motto "Nascuntur Poetæ, non fiunt;" size of plate 13.6 × 10.1.

11. Iohn Milton. Drawn and etched MDCCLX by I. B. Cipriani, a Tuscan, at the desire of Thomas Hollis, F.R. and A.SS., from a picture in the collection of the Right Hon. Arthur Onslow, Speaker of the Commons House of Parliament. Portrait enclosed in an oval, formed by intertwining boughs of laurel, and below Milton's sonnet—"How soon hath time," &c. The print is mentioned by Granger and Bromley, and forms one of the series in Hollis's Memoirs.

12. John Milton. In the collection of the Right Hon. Arthur Onslow, Esq., Goldar sculpt. Some further lettering has been badly erased. An oval, in a rectangular frame of tooth and egg pattern; size of frame 7.5 × 6.4.

13. John Milton. Published by R. Baldwin, at the Rose, in Pater Noster Row, 1752, for the London Magazine. An oval, representing masonry of four voussoirs, with name inscribed, and resting on a plinth; size of plate 5.7 × 4.1.

14. John Milton. An oval, representing masonry of six voussoirs, with segments cut off at top, bottom, and sides; no plinth; name at foot; size of plate 4.7 × 3.7; in the fifth volume of the British Biography, published by Baldwin, 7 vols., 8vo, London, 1766–72.

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* See Masson's Life, vol. i., p. 4.

15. John Milton. In same plate with Algernon Sydney, John Hamden, and Andrew Marvel; four ovals, in slightly ornamented frames, connected by interlacing ornament; size of each frame 2.5 × 1.8.

16. John Milton. In same plate with Ben Johnson, Robert Boyle, Esq., and John Locke, Esq.; four plain ovals, 2 × 1.8; I. June sc.

17. Iohn Milton. Ætat. 21. From an original picture in the possession of Lord Onslow, at Clandon, in Surrey, purchased from the executors of Milton's widow by Arthur Onslow, Esq., Speaker of the House of Commons, as certified in his own handwriting on the back of the picture; an oval, 6.2 × 5.9, in plate, 9.8 × 6.7; W. N. Gardiner sculpt.; published June 4, 1794, by John and Josiah Boydell and George Nicol; in Boydell's Milton.

18. John Milton. Ætat. XXI. Woolnoth sc.

19. Anon. Cornelius Jansen! W. C. Edwards. J. Yates, Printer. London, John Macrone, St. James's Square, and E. Graves, King William Street, Strand. In Macrone's edition, edited by Sir Egerton Brydges. The assigning of the picture to Cornelius Janssen has arisen from confounding its history with that of the portrait first described: the artist is wholly unknown.

20. Milton, ætat. 21. Engraved by Edward Radclyffe, after Vertue's engraving in 1731, from the original picture, then in the possession of the Right Hon. Speaker Onslow; in Masson's Life of Milton.

Marshal's Engraving.

This portrait, which appeared in Humphrey Moseley's original edition of Milton's poems, in 1645, is one of considerable rarity and importance. It was the subject of the Greek epigram "In effigiei ejus sculptorem," in which the poet gave vent to his dissatisfaction with the manner in which Marshal had executed his task. Whether the complaint was directed against the coarseness of the engraving, or the unfavorable representation of Milton's personal appearance, is a point which, though it has given rise to some discussion, is not of much importance; for it is generally believed that Marshal was the designer as well as engraver of the head; and the term "ζωγραφος" in the epigram is applicable to him in either capacity. Horace Walpole says that Marshal was "employed by Moseley, the book-"seller, to grave heads for books of poetry; and from their great similarity "in drawing and ornaments Vertue supposed that he drew from the life, "though he has not expressed *ad vivum* as was the custom afterwards; and "he was confirmed in this conjecture by a print of Milton, at the age of "21, with which Milton, who was handsome, and Marshal but a coarse "engraver, seems to have been discontented, by some Greek lines that are

"added to the bottom of the plate. Vertue adds that from this to 1670 "he knows no engraving of Milton, when Faithorne executed one with "*ad vivum delineavit et sculpsit;* and this Vertue held for the most "authentic likeness of that great poet, and thought Marshal's and Faith-"orne's bore as much resemblance as could be expected between features "of 21 and 62." (*Walpole's Catalogue of Engravers, 1st ed., p.* 38.) The fact just noticed, namely, that this print was the only engraved portrait by which Milton's supposed features were known to the public between 1645 and 1670—a period which embraced nearly the whole range of his controversial writings—invests it with an importance far beyond its merits. Salmasius, in a passage in his "Defensio Regia," quoted by Walpole and Warton, applies to it the epithet of "comptulam"; but this could only have been meant to apply to the dress. The features would rather seem to have justified some of the terms in which the same author, in his posthumous work "Ad Joannem Miltonum Responsio" attributes to Milton "frontem ferream, cor plumbeum, animum improbum, malam linguam, "stylum atrocem." (*Responsio*, p. 2). The same impression as is indicated by the epithet "comptulam" led the author of "Regii sanguinis clamor" to taunt him with being a Narcissus; to which Milton, in a passage in his "Defensio pro se," also partly quoted by Warton, replies:—"Narcissus "nunc sum, quia te depingente nolui Cyclops esse; quia tu effigiem mei "dissimillimam, prefixam poematis, vidisti. Ego vero si impulsu et ambi-"tione librarii me imperito scalptori, propterea quod in urbe alius eo belli "tempore non erat, infabre scalpendum permisi, id me neglexisse potius "eam rem arguebat, cujus tu mihi nimium cultum objicis." (*Prose Works, ed.* 1698, *vol.* 3, *p.* 123.) This passage goes far towards settling the question as to the date of the portrait. The engraving is spoken of as having been executed "eo belli tempore" applicable to the date of its publication; and no hint is given of its having been engraved, as Warton assumes, from some earlier drawing or painting in 1629, so as to justify the inscription of "Anno Ætatis Vigess: Pri:". The apparent age, which in 1645 would be thirty-seven—the generally received opinion that Marshal's prints were usually from the life—and the passage from Milton's "Defensio pro se," in which he accounts for the badness of the likeness by a reason which, though valid in relation to an original portrait in 1645, could have no reference to an earlier one then copied, combine to shew that in assigning the age of twenty-one to his print Marshal was as reck-

less of dates as of resemblance to his original. I have only one conjecture to offer towards explaining away the difficulty. Though it is impossible, comparing the Marshal with the Onslow portrait, to treat the one as a copy of the other, it is possible that Marshal may have been allowed access to the Onslow portrait to aid him in the absence of the sitter; and the adoption of the date which actually belonged to the Onslow portrait may thus in some way have originated. The engravings may be described as follows:—

21. Ioannis Miltoni Angli Effigies Anno Ætatis Vigess: Pri: (inscribed round an oval) W. M. Sculp. In the background an Arcadian scene; and in the four corners, outside the oval, the Muses Melpomene, Erato, Urania, and Clio, with their names; beneath, the Greek epigram:*—

Ἀμαθεῖ γεγράφθαι χειρὶ τήνδε μὲν εἰκόνα
Φαίης τάχ ἂν, πρὸς εἶδος αὐτοφυὲς βλέπων.
Τὸν δ' ἐκτυπωτὸν οὐκ ἐπιγνόντες, φίλοι
Γελᾶτε φαύλου δυσμίμημα ζωγράφου.

The size of the plate is 5.7 × 3.6. Its market value is more proportioned to its rarity than its beauty. An impression at the sale of Sir William Musgrave's duplicates sold for £4 18s., and the *Bibliotheca Anglo-Poetica* quotes the price of a copy of the minor poems, 1645, with the plate, at £5, and another with Vandergucht's copy of it at £1 11s. 6d. It is of course mentioned in all the works on English engraved heads, and is much coveted by collectors.

22. Id. A good modern copy of the same print is of frequent occurrence.

23. Ioannis Miltoni Angli Effigies Anno Ætatis 21. M. V. dr. Gucht sc. A reduced copy of the above; the sides and top of the oval partly cut away; and the four Muses in the corner omitted. This print is mentioned by Granger and Bromley, and was prefixed to Tonson's edition of "Paradise Regained," 12mo, London, 1713, the engraver innocently copying the Greek inscription and appending his own name, without being aware that he was applying the censure to himself.

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* This epigram and other Greek verses of Milton are the subject of a severe critique by Dr. Burney, which formed an appendix to Warton's second edition of the Minor Poems. Whatever may be their faults of syntax and prosody, it must be admitted that the lines are destitute of epigrammatic point, to an extent which enables them almost to defy translation; but the following will convey something like the sense and spirit of the original:—

Who, that my real lineaments has scanned,
Will not in this detect a bungler's hand?
My friends, in doubt on whom his art was tried,
The idiot limner's vain attempt deride.

Milton's strictures on the engraver were made the subject of attack by Salmasius, who, in answer to a grossly offensive play upon the Latin form of his name (for an explanation of the allusion see Ov. Met. iv. 285) writes:—"Quis nomen Salmacidis magis "meretur, quam ille, qui quod est fæminarum sibi arrogat, et de solo formæ bono "gloriatur, qui etiam sculptori suo versibus editis in vulgus maledixit, quod se minus "formosum quam revera se esse putaret, pinxerit?" (*Responsio, p.* 39.)

Warton, in noticing this in a note to his first edition (p. 546), adds that he is "not "sure if Vertue has not fallen into the same unlucky mistake." If so, I have not met with the print by Vertue to which he alludes; and from the passage being omitted in Warton's second edition, and an allusion substituted to Vertue's quotation from the Odyssey, I presume the original observation was found to have been written in error.

Faithorne's Engraving.

The peculiarities of this portrait of Milton have been already sufficiently noticed. It is one of the "pictures before his books" condemned as not at all like him in Aubrey's note; but being the only likeness of the poet taken at mature age, and published in his lifetime, it has been more frequently copied than any of the others.

24. Ioannis Miltoni Effigies Ætat. 62, 1670, inscribed on the face of a low pedestal, on the top of which is "Gul. Faithorne ad vivum Delin. et sculpsit." The portrait is an oval, of 4.9 × 4.2 inside measure; and the entire plate forms a 4to, measuring 7 × 5.2; published, as before mentioned, in Milton's History of Britain, in the year it bears date. It is mentioned in Granger and Bromley; and a good impression of the plate in its original state is worth a couple of guineas.

25. Id. A modern copy of the preceding. The impressions are common; but they are extremely coarse, and convey an idea of the features very different from the original engraving, which, however, is not in Faithorne's best manner, and would not justify the compliment paid him by his friend Flatman, who says:—

"A 'Faithorne sculpsit' is a charm can save
From dull oblivion and a gaping grave."

26. Joannis Miltoni Effigies Natus Anno 1608, Obiit Anno 1674. Gul. Faithorne ad vivum Delin. et sculpsit. The oval as in the former, but standing on a deep panelled surface, having in front Milton's arms and crest, so as to form a folio plate 8.5 × 5.2; in Toland's edition of the prose works, 1698. Each impression is, however, struck off from two plates; for which purpose the original, published in 1670, has been cut away immediately below the name of the engraver, and the oblique lines forming the ends of the upper surface of the pedestal erased, and the horizontal lines of shading continued to the edge of the plate. The fact of this alteration having been made shews that the modern impressions of the 4to plate are copies, and are not struck from the original plate worn and retouched.

27. Ioannis Miltoni Effigies Ætat. 62. 1670. A plate so much in Faithorne's manner that it has the appearance of his plate cut down at the sides, and without the "Gul. Faithorne ad vivum delin. et sculpsit" on the top of the pedestal; but a closer inspection shews in every part, and especially by a reduction in the scale, that this is a copy. The entire plate measures 6.6 × 4.2, and the interior of the oval 4.4 × 3.9. In the sale catalogue of Sir Mark Sykes's collection (1824) is

described a copy of the Faithorne print "before the plate was reduced." I am not aware that the plate ever was reduced, unless the removal of the lower portion for the purpose of the folio impressions can be so described; and believe the compiler of the catalogue had derived his impression from a hasty inspection of the print now under description.

28. Ioannis Miltoni Effigies Ætat. 63. 1671. W. Dolle sculpsit. A copy, on a reduced scale, from Faithorne's 4to, and similar in all the arrangements; size of plate 5.1 x 3.1; published in the "Artis Logicæ plenior Institutio," 12mo, London, 1672, and again in the second edition of "Paradise Lost," in 1674, and the third in 1678; mentioned by Granger.

29. Ioannis Miltoni Effigies Ætat. 63. 1671. No name of engraver; a close copy of the last except in the features, the expression of which is considerably varied, and the plate is a trifle smaller each way.

30. Mr. John Milton obt. anno 1674, ætat. 66. I. Simon fecit. Mezzotint; oval, with a wavy fillet in the two upper corners; size of plate 6.8 x 5. The only copy I have seen is in the print room of the British Museum, and it is believed to be a portion of the plate described in Bromley's catalogue as a mezzotint, one of four portraits, the others being Beaumont, Fletcher and Cowley: but the ornamentation is certainly different from those and other uniform portraits with which I am acquainted, published by Bowles in sets of four, by Simon and Faber, all of which are in ovals formed of palm branches. The folio mezzotint by Simon, already alluded to and hereafter to be described, must not be confounded with the present print, which is copied from the Faithorne portrait.

31. Anon. R. White sculp. Portrait in an oval formed of leaves and bold and peculiar scroll work; and at foot, in an ornamented panel, Dryden's hacknied lines, here published for the first time:—

"Three poets in three distant ages born," &c.

Size of plate 10.5 x 7; published in the fourth edition of "Paradise Lost," folio, London, 1688, and various subsequent editions; mentioned by Granger and Bromley. The costume and attitude proclaim this to be a copy of the Faithorne portrait; and the features do not vary from it so far as to suggest a doubt on the subject; but yet there is a marked change in them, consisting principally in an increased roundness in the lower part of the face, and less severity in the expression. Both these distinguishing features are also to some extent observable in the folio mezzotint by Simon; and if the original of the latter was, as it purports to have been, a drawing from the life by Robert White, we may trace to the influence of his actual knowledge of Milton's features the slight deviation from the Faithorne engraving, of which that now under discussion is evidently a copy.

32. Ioannis Miltoni Effigies, ob. 1674, Æt. 66. G. Vertue sculp. Portrait in an oval, of which the sides are partly concealed by a kind of architrave, and the top by a curtain, looped up at the left corner by a loosely flowing fillet, and terminating

in a tassel on the right side. On the curtain are the poet's name and date of death as above, and in a framed panel at foot, within a peculiar scroll, Dryden's lines. The plate appeared in Tonson's edition of the Poetical Works, in 2 vols, 4to, London, 1720; mentioned by Granger and Bromley; size 8.8 × 6.1. In this, as in the last described print, there is a softened expression, to be accounted for by Vertue's thorough acquaintance with all the representations of the features of Milton, and among others the drawing attributed to White, of which, I have come to the conclusion, Vertue made a more direct use in his portrait of 1725.

33. Joannes Milton. Ætatis LXII. 1670. G. Vertue sculp. Closely resembling the preceding, and probably an alteration of the same plate; the difference being that in the print now under description the lettering on the curtain is the name and age as above, and in the panel at foot Dryden's lines are replaced by a quotation from Homer's Odyssey, B. viii, l. 63. printed in four lines:—

"Τὸν περὶ Μουσ' ἐφίλησε," &c.

Published in Bentley's edition of "Paradise Lost," 4to, London, 1732; mentioned by Granger and Bromley.

34. The same plate, with the date altered to 1747, was prefixed to the second volume of Newton's edition of "Paradise Lost," 2 vols., 4to, London, 1749, which Hollis's Biographer (see p. 117) treats as the original condition of the plate.

35. Anon. J. Gwim sculp. Size 5.6 × 3.7. In the arrangement of the portrait, curtain, and scroll-headed panel containing Dryden's lines, there is evidence of this plate having been copied from Vertue's first 4to print after Faithorne. It is a coarse but scarce print, and is found in Grierson's edition of the "Paradise Lost" and "Paradise Regained," published in Dublin in 1724; but it has scarcely the appearance of having been engraved for the book, which is a 12mo, and the print has to be folded both ways to admit of its insertion.

36. Anon. G. Vertue sculp. (the G. and V. combined in one letter.) Rectangle; with Dryden's lines and the name "Dryden" at foot. Granger describes a portrait thus:—"Milton; Vertue sc., sm. 12mo." There are several portraits prefixed to Tonson's 12mo editions and elsewhere, so similar to each other, and to which Granger's description may be intended to refer, that a minute account of this and the two following prints may be desirable. The size of the engraving in the present, exclusive of the lines, is 3.7 × 2.8; portrait facing towards its proper left; in third line "thought" printed without a capital, and "Surpas'd" with capital and one s in last syllable; in fourth line no comma after "majesty"; in fifth "farther "goe"; and in sixth "*former two*" in italics without capitals.

37. Same description except as follows:—size 3.8 × 2.6; "Thought" with capital; "surpass'd" without capital; comma after "majesty"; "farther go"; "Two" in Roman letters and a capital T; no name of engraver.

38. Same description except as follows:—size 3.7 × 2.9; face towards proper right; "thought" without capital, and "Surpass'd" with; comma after "majesty";

"further goe"; "Former" with capital and "*two*" in italics without; no name of engraver.

39. Milton. G. Vertue sculp. One of five ovals forming an 8vo page, the centre portrait being Chaucer, and the others Milton, Butler, Cowley and Waller; mentioned by Granger and Walpole. It forms one of the illustrations to Jacob's Poetical Register, 2 vols., 8vo, London, 1723, but the plates have the appearance of having been collected from various sources, and this may previously have appeared elsewhere.

40. Anon. Portrait in Faithorne costume &c., but with still further divergence in feature; in a circle formed by a serpent, bordered, at a distance of $\frac{1}{16}$ of an inch, by a circular border, extended at the sides by two shells, and contracted at the top by the boundary of the plate, and at the bottom by a pedestal with the inscription—

• • • • Cui mens divinior, atque os
Magna sonaturum • • • •

size of entire engraving, which has the appearance of a vignette, 3.8 × 2.6; mentioned by Granger, who ascribes it to Vertue.

Granger describes another plate:—"Milton; in a small round encompassed with "a serpent; Vertue sc." If this be a separate print I have not seen it, and know not whether it would be correctly inserted in this place.

41. Anon. Portrait in a circle 1.2 in diameter, on a wreathed pedestal, between two sphynxes, in the attitude of heraldic supporters; appears to be a vignette, or cut from a larger plate.

42. The Effigie of John Milton: author of "Paradise Lost." In an oval, on a diapered ground, and partly covered at foot by a border of acanthus leaves, surrounding a vignette of the Temptation; at the corners formed by the lower part of the oval, are several volumes, of which two are open, and are inscribed with the titles of "Comus" and "Lycidas." This is a carefully engraved plate, measuring probably about 4.7 × 2.7; but my copy, which is the only one I have ever seen, has been somewhat cut down. The features have an expression differing considerably from any of the Faithorne portraits before noticed.

43. Milton. G. Faithorne delt., Landon direxit. A copy of the Faithorne print in outline, for the Hist. d'Angleterre.

44. Joannis Miltoni. Æt. LXII. MDCLXX. Gul. Faithorne ad viv. del. Car. Knight sculp A handsome engraving, in an oval, standing on a pedestal, with name and age as above on the front, and on the base "Sana posteritas sciet"; size of plate 6.5 × 4.4; prefixed to Capel Lofft's second edition of the first and second books of "Paradise Lost," published at Bury St. Edmunds in 1793. In the preface to his first edition, published in 1792 (p. xxv), he says—"If any engraving accom-"panies this edition, it will be only the portrait of Milton, in the most unembel-"lished style, from the engraving which was prefixed to the second edition." It is curious that Lofft was at this time, as he admitted in his subsequent edition, unac-

quainted with the existence of the Faithorne portrait, and knew it only from Dolle's copy.

45. John Milton, aged 62. Engraved from an original by William Faithorne, published 1670. Published 13 June, 1796, by I. & H. Richter. An oval, measuring 5 × 4.4; prefixed to Richter's edition of "Paradise Lost," 4to, London, 1794; so that the above date or that of the imprint of the volume is an error.

46. Milton. Faithorne pinxt. 1670. Woodman, Jun., sct. Rectangular; in frame surmounted with a panel containing a trumpet and laurel wreath, and at foot a wreathed sarcophagus, inscribed with name as above; size of engraving 5.6 × 3.6; published Nov. 1st, 1807, by Mathews and Leigh. It appears to be uniform with the series of portraits issued by the same publishers in the "Cabinet; or Monthly "Report of Polite Literature," but I do not find it inserted in the volume of the date it bears.

47. John Milton. P. Roberts sculp. No background; published by T. Dolby, Oct. 1, 1821.

48. John Milton (facsimile of autograph). H. Robinson sc. London, William Pickering, 1831. A beautifully engraved oval, 2.6 × 2.2; published in his Aldine edition of Milton.

49. John Milton (facsimile of autograph). Gul. Faithorne ad vivum del. Cochran sculp. Engraved for Ivimey's Life of Milton; published by Effingham Wilson, 5 Jan., 1833.

50. John Milton. Engraved by W. C. Edwards; published by Westley and Davis, London; prefixed to Fletcher's edition of the prose works, royal 8vo, London, 1833; rectangle, 4.9 × 4 exclusive of lettering. The softened expression already noticed indicates that this has been engraved from Vertue's copy of the Faithorne portrait.

51. Milton. London, L. Tallis, 8vo; published in Leonard Townsend's "Alphabetical Chronology of Remarkable Events."

52. An octagon, 3.7 × 3.1; a neatly finished modern engraving, which, being only known to me by a proof before letters, I am unable to describe further.

53. Jo. Milton, 1631 (facsimile of autograph). Engraved by W. Humphreys, from a print by Faithorne, London, William Pickering, Ap. 23, 1851. Rectangular, 4.9 × 3.9; and at foot, above the signature, a facsimile of Milton's inscription in his copy of Aratus, now in the British Museum:—

"Cum sole, et Lunâ semper Aratus erit."

Others derived from the Faithorne Portrait.

We come now to a class of prints, in which the likeness presents so great a divergence from the features we have been contemplating, that I have thought it best to class them under a separate heading. The costume

and attitude evidence their origin, remotely at least, from Faithorne's portrait: and I think it probable that another drawing from it by Cipriani, while in the possession of the Tonsons, may have led the way to the great variety of feature we shall shortly have to notice. The identity of Messrs. Tonson's drawing with Faithorne's original I am not disposed to question; but the story related in Hollis's memoirs *(p. 619)* of Vertue's going on purpose to see Mrs. Clarke at her lodgings near Moorfields, and causing divers paintings, and this drawing which he took with him, to be brought into the room as if by accident, is inconsistent from beginning to end, and suggests the idea that it had its origin in a confused recollection of Vertue's and Richardson's accounts of two other interviews with Deborah Clarke. That the scene described might have taken place in his own studio would seem more possible: but that while calling on her at her lodgings, painting after painting could have been brought into her own room "as if by accident" without attracting her attention is inconceivable. Her surprise at the sight of the drawing is scarcely less remarkable: for if it was Faithorne's original, she must have known of its existence, and been as familiar as we are with the engravings from it, even if she had left her father's house before the original was taken, and had never seen it, and I think the probability is it was taken before she went to Ireland. The drawing however needed no such anecdote to authenticate it. If it agreed with the Faithorne engraving, Vertue's own opinion to that effect, formed on internal evidence, would have been infinitely more valuable than Mrs. Clarke's; and there is no apparent improbability of its having been—what Hollis supposed it to be—the original of that engraving. In the faithfulness of Cipriani's representation of the features I confess I have less confidence, and I attribute, in a great measure, to the influence of his engraving the great variety of features found among subsequent prints, the costume and attitude of which attest their origin in the Faithorne portrait.

54. John Milton. Drawn and etched MDCLX, by I. B. Cipriani, a Tuscan, at the desire of Thomas Hollis, F.R. and A.SS., from a portrait in crayons, now in the possession of Messrs. Tonson, Booksellers in the Strand, London. Portrait enclosed in an oval wreath of laurel; and below, the quotation:—

"I sing with mortal voice unchang'd," &c.

The print is mentioned by Granger; and forms one of the Hollis series.

55. John Milton. J. Hall sculpt. Printed for John Bell, March 1st, 1777.

An oval suspended from wreath and riband; below, the name on a label; size 4 x 2.4.

56. Id. Another, very similar, in Bell's British Poets.

57. Milton. From Vertue. Milton sculpt. Published by Harrison and Co., Dec., 1795. Oval, 1.9 x 1.4; engraved as a vignette illustration to a short biographical notice. It may possibly have been copied from one of Vertue's 4to. prints; but the features induce me to insert it in this place.

58. Anon. J. Miller sc. An oval much covered with drapery; and beneath, in a circle, a lyre and laurel branches. This portrait is inserted here on the strength of the costume: but both as regards it and many subsequent ones it will be unnecessary to repeat that they present every shade of dissimilarity from the original from which they are derived.

59. Anon. Holbrook sc. A bad copy of the last mentioned plate, but reversed, and with Dryden's lines at foot; prefixed to some copies of the prose retranslation of Paradise Lost from Raymond de St. Maur, 8vo, London, 1773.

60. I. Milton. N. Parr sculp. An oval, 1.3 × 1.2, suspended by a riband.

61. Milton. Bartolozzi sculp. A circle, partly surrounded by laurel branches and fillet; on a pedestal inscribed with name; 4.7 × 2.8.

62. Milton. R. H. Cromek sculp. Very similar to the last; circle surmounted by laurel boughs; name on panel; size 3.8 × 2.6.

63. Anon. From an original painting. Heath sculp. Resembling the preceding; qy published in Aikin's British Poets, 1802.

64. Milton. Engraved by W. T. Fry; published by Thomas Tegg; in Howard's Beauties of Milton. Ornamented rectangular frame, 4.2 × 2.5; the name on a festoon overhanging the top. The portrait has a strong resemblance to Cipriani's engraving.

65. Anon. One of three portraits, in circles 1¼in. in diameter, in the title page of the Beauties of Milton, Thomson and Young, published by Kearsley, 12mo, London, 1783.

66. John Milton. A. Haenish delt., Schenck and McFarlane, Lithographers, Edinburgh. Folio print.

The White Portrait, or Simon's Folio Mezzotint.

The importance I am inclined to attach to this portrait and my reasons for it have been discussed in my introductory observations; and the description I have already given renders unnecessary any further detail. The doubt there suggested furnishes the reason for my having provisionally given it an alternative title, until I am able to ascertain whether it was published before or after 1734.

67. Mr. Iohn Milton. R. White ad vivum delin. J. Simon fecit. Sold by T. Bowles in Paul's Church yard and J. Bowles in Cornhill. Mezzotint; size 11.2 x 9.2, within the plain oval frame; and at foot Dryden's lines in double columns. I have elsewhere mentioned the apparent rarity of this head, and the absence of mention of it by Granger or Bromley. It is mentioned in the Catalogue of the Sutherland collection (1837), a work which does more credit to its printer than its compiler.

68. Milton. A composition, containing in the foreground a bust of Milton, copied from the above, and in the background pictures of Cowley and Denham, the three names being inscribed on a panel at foot; engraved by Anthony Cardon, from a drawing by Thomas Uwins, after the originals of Sir Peter Lely and R. White, and published 1st November, 1805, by John Sharpe.

69. An oval, 2.6 x 2.3; known to me only by a proof before letters. Though without the wreath, the continuation downwards of the folds of drapery depending from the shoulders to the point at which they connect themselves with each other, as noticed already, shews that this print has been copied from Simon's rather than from Richardson's portrait.

The White-Richardson Likeness.

I have already stated the doubts, which nothing but proof of dates is likely to settle, whether Richardson or Simon copied from the other of them the wreath which forms a distinguishing feature of their respective prints. If Richardson was the copyist, and concealed the source from which he derived it, we have no reason to doubt the statement of Simon that his Mezzotint was from an original drawing of Robert White who was contemporary both with him and Milton. If Simon was the copyist, we have no artist's name to set up in opposition: and there is still room for the possibility of his having had grounds, unknown to us, for attributing it to White. Pending the solution of these doubts, I have assumed the truth of the former alternative, and given the name of White to the original drawing in the possession of Richardson in 1734; and consequently the joint names will properly belong to the class of portraits which were derived from Richardson's study of that drawing. It will be convenient to introduce them by an extract from his preface to his "Explanatory notes "and Remarks on Milton's Paradise Lost," published in 1734. At p. ii he says:—"The print prefixed shews the face of him who wrote Paradise "Lost, the face we chiefly desire to be acquainted with. 'Tis done from "a picture which I have reason to believe he sate for not long before his "death: I have therefore given a little more vigour to the print and but a

"little. The complexion must be imagined as of one who had been fair "and fresh coloured. Toland says he was ruddy to the last. My picture "and other information does not tell us that, but that he might have been "so not long before. The colour of his eyes inclined to blue not deep; "and though sightless they were as he says himself 'clear to outward view "of blemish or of spot;' he was told so and 'tis certain the gutta serena "which was his case does not appear to common eyes and at a little "distance. But blindness even of that kind is visible in the colour, "motion, and look of the eye which has the sad unhappiness of being "extinguished by it. 'Tis wonderfully expressed in the picture from "which this print was made as well as the sett of the mouth and the rest "of the air. I have imitated it as well as I could in a way of working "which I never practised but on a few plates and those in my youth, "except an attempt on one or two near twenty years ago. The laurel is "not in the picture. The two lines under it are my reason for putting it "there—not what otherwise would be imagined: all the world has given it "him long since."

70. Anon. Etching. J. R. sen. f. From an excelt. orig. (crayons) in his collection. Portrait with wreath as described above, the face being turned to the proper left, and, under it:—

> "Nectens aut Paphia Myrti, aut Parnasside Lauri
> Fronde comas, at ego secura pace quiescam.—Milton's Mansus."

It is mentioned in Granger and Bromley; size of plate 6 × 4.

71. Anon. Etching, lettered as the preceding, and so closely resembling it as to be easily mistaken for it, but differing in size (being 6.1 × 3.5), in the drapery being continued a little lower down on the chest, and in the laurel branch on the right temple consisting of nine leaves instead of eleven.

72. Milton. G. Barron delt. et fecit. An etching, copied from Richardson's original, but reversed.

73. Anon. Engraving reduced from Richardson's etching, but reversed as in the last; size, exclusive of lettering (which is copied from Richardson's), 4.2 x 2.7.

74. Anon. J. Richardson f. An etching much improved by the omission of the wreath; at foot are the following verses, signed J. R. Jun.:—

> "Authentic Homer Light's whole Fountain flows,
> Immense! Feirce Dazling yet, & Torrent Glows:
> His Temper'd Beam the Mantuan Bard reflects,
> Shines Sweeter, & his Fairest Rays Selects:
> Thine Milton Both, but not Both These Alone,
> Thou, like Elysium, Know'st Another Sun."

Size 8 x 5¾. Warton's note (*p.* 531 *ed.* 1791) describes it as "another etching of "Milton by Richardson the younger, before he was blind, and when much younger "than fifty, accompanied with six bombast verses, 'Authentic Homer,' &c." I know not what authority there may be for attributing this etching to the Younger Richardson. In manner, it appears very like that of the father; and the lettering seems to attribute to the son nothing more than the authorship of the crazy verses.

75. Anon. An Etching in Richardson's manner, and so described by Granger; size 9.9 x 7.6; without lettering; very similar to the last, but on a larger scale, and with a somewhat different expression. Whether it is an etching by the elder Richardson is a question of some importance; for the drapery, differing from the preceding in being more full over the shoulders, and meeting at an acute angle over the chest, points it out as a connecting link with what I have called below the "Baker Drawing," to which the resemblance in this respect is striking; but I am unable to explain the precise connection between them.

*** Some other etchings by Richardson, which might perhaps have been placed here, will be found described among the engravings from Busts, Medallions &c.

76. Anon. Engraved by J. Roper. An oval, 2.6 x 2.1; forming a vignette in the engraved title to Parsons's edition of Paradise Lost, roy. 8vo, London, 1796.

The White-Vertue Likeness, or Vertue (1725).

I have adopted the first of these titles to indicate what I believe to have been the origin of this portrait, which Granger estimates among the capital works of Vertue. No other person in his day was so well acquainted with the features of Milton, so largely employed in reproducing the known portraits of him, or more scrupulously faithful in doing so. When engaged on his series of Twelve Heads of the Poets, it may well be supposed to have been a reasonable ambition of Vertue to produce, from a careful comparison of the various authentic portraits, a print which, without being a servile copy of any of them, should embody his own ideal of the features of the Poet. The print about to be noticed appears to me to answer this description. The same drawing which served as an original to Simon and Richardson, or possibly Simon's mezzotint itself, (for Richardson's etching was not published till nine years afterwards,) seems to have been adopted as regards the attitude, and I think I can trace in the features a blending of the expression of that drawing with the milder aspect of the Faithorne portrait, as rendered in White's engraving of 1688 and Vertue's own 4to prints. The costume closely follows the same drawing, except as regards the arrangement of the drapery, the treatment of which is original, and will serve us, as the distinguishing marks of the Faithorne engraving have

done already, in detecting the origin of subsequent prints. Mr. Cunningham, in a note to his edition of Johnson's Lives (vol. I, p. 131), passes over Richardson's etching with slight notice as a "compound portrait," and observes that "posthumous additions of this kind are only impertinences at "the best." I am not disposed in general to dissent from this proposition: but it seems hard that what is the daily practice of the sculptor—the production, from the best extant materials, of an ideal representation of the features of illustrious men of a past generation—should be a privilege wholly denied to the sister art; and a portrait so produced may surely claim our approval in proportion to the authenticity of the originals relied upon as authorities, and the conscientiousness and skill with which the available materials have been used. Such a claim for indulgence would be justly forfeited by any deception as to the original from which an engraving purports to have been taken: but in the present instance, though the size and pretension of the plate would have led us to expect a statement of the authority used, we find only the engraver's own name and the date of his work—a circumstance which tends to confirm this explanation of the origin of the portrait. The "ætat. 62, anno 1670," if my conjecture be correct, is to be regretted, as tending to the practice I have just been condemning, but I presume the artist only meant to indicate the age at which he conceived his portrait to represent the features of Milton, namely the date of the Faithorne engraving.

77. Ioannes Milton. Ætat. 62. A.D. 1670. Geo. Vertue sculp. 1725. In an oval composed of ornamental masonry; the age and date round the frame; the name on a block above; at foot of the oval, an escutcheon containing what is intended for Milton's arms, but the eagle is single headed as in another print of Vertue's; and beneath, on a panelled block, Dryden's lines; size of plate 14.4 × 9.4. Illustrissimo Dno. Dno. Algernon Comiti de Hertford Dno. Percy, &c., &c. Obsequentissime D. D. D. G. Vertue. Mentioned in Granger and Bromley.

78. John Milton. Ætat. 62. Engraved by Owen from a drawing by Vertue, in the collection of Thomas Brand Hollis, Esq. Published by R. Wilks. Oval, 3.5 × 2.7; and beneath, name and age on a panel. The execution is far from doing justice to Vertue's likeness; but the mention of the authority as a *drawing* by Vertue is confirmatory of the suggestion made above as to the history of the preceding print.

79. John Milton. Ætat. 62. Vertue delint. W. N. Gardiner sculpt. From the original drawing by Vertue, in the collection of Thomas Brand Hollis, Esq., at the Hyde, Essex. Oval, 6.2 × 5.9; published June 4, 1794, by John and Josiah

Boydell and George Nicol; forming one of the series of three portraits in Boydell's Milton, the other two being the Janssen and Onslow portraits.

80. John Milton. Blood sc. Published by Longman, Hurst, Rees & Orme, 1809; size of engraving 4.1 x 2.8.

81. Milton. Engraved by R. Cooper. From an original picture, for La Belle Assemblee; size 5.3 x 4.7, exclusive of lettering; published July 1, 1810, by J. Bell.

82. John Milton, 1667 (facsimile of autograph). Published by William Pickering, 1826; appeared in his three volume edition of the Poetical Works, published in that year; size of engraving 5.5 x 3.7. The facsimile autograph is copied from Milton's agreement with Samuel Symons, which bears date the 27th April, 1667; and the date attached to the signature in this print is only meant to indicate the period at which the facsimile represented the supposed handwriting of the poet. Whether the signature be really that of Milton is a question foreign to our purpose, and is under discussion among more competent authorities.

83. John Milton (facsimile of autograph). William Faithorne del. R. Hicks sculp. Published by Thomas Kelly, June 1, 1829. Size 3.1 x 2.4, exclusive of autograph and lettering; a close copy of Vertue's 1725 engraving, though ignorantly attributed to Faithorne.

84. John Milton (facsimile of autograph). Vertue. W. C. Edwards. London, John Macrone, 1835; published in the six volume edition of the Poetical Works edited by Sir Egerton Brydges. The list of illustrations erroneously describes it as a "Portrait of Milton in his 62nd year, from Faithorne's original drawing."

85. John Milton. Rectangle, 1.5 x 1.2, in a frame of outline scroll work; no name of engraver.

86. Jean Milton. Né à Londres en 1608 mort en 1674 agé de 66 ans. E. G. Schmidt sculpsit. A Paris chez Odieuvre. Oval, 3.6 x 3, in a plain frame; escutcheon with single headed eagle at foot; the whole on a pedestal inscribed as above.

87. Jean Milton, auteur du Poeme du Paradis perdu et de celui du Paradis retrouvé, né à Londres en 1608, mort en 1674. Suite de Desrochers. Se vend Paris chez Petit. Oval, 3.9 x 3.3, formed of masonry; a scroll, at foot, inscribed as above; and below a tablet with six lines of verse, commencing—

"Par la sublimité de son double Poème," &c.

88. J. Milton. Né à Londres le 9 xbre 1608. Mort a Brunhill [Bunhill-fields] le 15 nbre 1674. F. Bonneville del. Oval, 4 x 3.4.

White-Vandergucht Engraving.

The attitude of the engraving next to be described proclaims its origin in the same drawing as the original of the portraits last noticed, and is my justification for the title I have given it. Vandergucht has altered the

features so as to represent a much younger man than the Vertue engraving, and has clothed the figure in the slovenly undress in vogue among the artists of his day.

89. Giovanni Milton. Jno. Vander Gucht sculp. A large oval; and at foot an escutcheon with the single headed eagle, with helmet, crest, and lambrequin, and various ornaments, such as harps, wreaths &c.; size of plate 12×7.7; in the Italian translation of "Paradise Lost," by Paolo Rolli, folio, London, 1736; mentioned by Granger.

90. Joannes Milton. N. Parr sculp. An oval, with somewhat similar ornaments; size of engraving 5.7×3.2.

91. Giovanni Milton. Antonio Baratti scul. An oval, on a pedestal; size of plate 5.2×2.9; in the edition of Rolli's translation, published in 12mo, Paris, 1758.

The Baker Drawing, &c.

In my introductory observations I quoted a passage from Todd's Life, confounding Faithorne's and Richardson's drawings and one which, after passing through the hands of the Tonsons to Mr. Baker, was engraved for Todd's work. In a note at p. 141 of his second edition (1809) Todd writes:—"In the year 1670 there was another plate, by Faithorne, from a "drawing in crayons by Faithorne, prefixed to his History of Britain. * * "The print has been several times copied. By an ingenious young artist "a new drawing was taken from Faithorne's picture, (supposed to be the "best likeness extant of the poet, and for which he sat at the age of 62,) "by the kind permission of William Baker, Esq., in whose possession it "now is; from which an engraving was made for my first edition of "Milton's Poetical Works. From the same picture the neat engraving in "the present edition is also made. * * * The Richardsons, and next "the Tonsons, before Mr. Baker, had the admirable crayon drawing above "mentioned. * * * This head by Faithorne was etched by Richard-"son, the father, about 1734, with the addition of a laurel crown to help "the propriety of the motto." There is no question that the drawing copied by Cipriani, and which I am ready to admit to have been Faithorne's original drawing, was in the possession of the Tonsons, but I have pointed out that it has no connection with the drawing copied by Richardson; and a glance at the engravings in Todd's Milton will shew that it had no more connection with the original from which they were taken. The drawing copied by Richardson *may have* also passed to the Tonsons, as stated by

Newton, and after him by Warton and Todd. That belonging to Mr. Baker no doubt passed to him from the Tonsons. My conjecture is that from the drawing copied by Richardson, and which we have treated as an original by White, or still more probably from the anonymous etching (No. 75) which we have placed with those of Richardson, the Tonsons had a new drawing made, for the purpose of having it engraved for their Baskerville edition of "Paradise Lost," and that this is the drawing belonging to Mr. Baker, and again copied and engraved for each of the editions of Todd's Milton. I base this conjecture mainly on the fact that the drapery of the portraits in the Baskerville Milton and in Todd's editions shews an actual identity, though departing slightly from that of the White and White-Richardson portraits, except the large anonymous etching (No. 75) to which the resemblance in this respect is very close. The attitude also is identical; and the features do not differ more than may be accounted for to those who have gone thus far with me by the inevitable divergence of successive drawings, and from these again having been copied by different engravers—more especially when we bear in mind that the first of them was Miller, whose engraving, it is fair to suppose, bore about as much resemblance to the original from which he professed to copy as that already described (No. 58) did to the Faithorne portrait. These engravings, then, and some others which may possibly have been derived from them, are arranged as follows:—

92. Anon. J. Miller sc. Portrait in an irregular oval, enveloped in drapery, which partly conceals a panel or pedestal, on which is a vignette representing the expulsion; size 6.5 x 4.3; prefixed to the edition of "Paradise Lost" edited by Newton, printed by Baskerville, and published by J. & R. Tonson, 4to, Birmingham, 1759.

93. The same print, without engraver's name, and cut down to the size of 5.8 x 3.6, to adapt it to an 8vo volume, was prefixed to Newton's "Paradise Lost," 8th edition, 2 vols. 8vo, London, 1778.

94. John Milton. Born 1608. Died 1674. T. Simpson del. J. Baker sculp. From the original drawing by Faithorne, in the possession of William Baker, Esq. Size 4.7 x 3.7; prefixed to the first edition of Todd's Milton, 6 vols. 8vo, London, 1801. Simpson is the "ingenious young artist" referred to in Todd's note. The features have more of the expression of White's drawing than the subsequent engraving by Collyer.

95. John Milton. Born 1608. Died 1674. From the original painting by Faithorne, in the possession of William Baker, Esq. Drawn by T. Simpson.

Engraved by J. Collyer. Same size; published in 1809, in the second edition of Todd's Milton.

96. John Milton. Born 1608. Died 1674. From the original painting by Faithorne, in the possession of William Baker, Esq. Drawn by T. Simpson. Engraved by T. A. Dean. Size 4.9 × 3 9; published in the third edition of Todd's Milton, in 1826. It was also prefixed to the fourth edition in 1851, lettered "John "Milton, Faithorne pinxit, Dean sculpt."

97. John Milton. Faithorne pinxt. Dean sculp. Published by J. G. & F. Rivington, 1833; prefixed to an edition of "Paradise Lost" issued by the Society for Promoting Christian Knowledge; size 3.6 × 3 exclusive of lettering; a neat copy of the preceding.

98. John Milton. Ætat. 62. Engraved by Holl. Published Nov. 23rd, 1799, by T. Heptingstall. Oval, 4.4 × 3.4. I class this and the copies from it, and several succeeding engravings, with the above, rather than multiply subdivisions; but there is a marked change of features, as well as costume, shewing that they are from a different drawing, as is evidenced, indeed, by the date, and I have some doubts whether even from the same original portrait. A further issue of this print is marked as "printed for Vernor & Hood and the other proprietors," and is prefixed to Bensley's edition of "Paradise Lost," 8vo, London, 1802.

99. John Milton. Engraved by J. Archer, for the select Portrait Gallery in the Guide to Knowledge. Rectangle, 4.6 × 3.8 exclusive of lettering; a close copy of the preceding.

100. Milton. W. French sc. John Tallis & Company, London and New York. A copy of the same print; in a tasteless border of irregular form, 6.2 in diameter, of curtains, leaves, &c., forming a plate to Wright's Universal Pronouncing Dictionary, royal 8vo, no date.

101. John Milton (with five lines of biographical notice engraved). London, William Darton, 1822. No. 33 in the first volume of his "Cabinet of Portraits;" a copy from the same, rather coarsely executed in the chalk manner of engraving; lyre and laurel wreath lightly sketched in behind the head; size of plate 4.9 × 3.1.

102. Milton. In a suspended frame, with ornamented corners, on the bottom of which the name is inscribed; outside size 3.2 × 2.7; a copy of the same.

103. Giovanni Milton. Onorate l'altissimo Poeta. Engraved by Mariano Bovi; oval, 5.7 × 4.3. The costume somewhat resembling some of the preceding, and the features more nearly approaching the White-Richardson type.

104. Giovanni Milton. Nato li 9 xbre 1608. Morto li 15 9bre 1674. B. Musitelli inc. Prefixed to Scolari's Saggio di Critica sul Paradiso Perduto, 4to, Venezia, 1818. A slight resemblance in costume is the only excuse I can allege for assigning the present place to this *φαύλου δυσμίμημα ζωγράφου.*

Vertue's Engraving (1750).

There are several other engravings bearing the name of Vertue, the history of which I am unable to explain. The principal one bears the above date; and the drapery is so nearly identical with that of the prints which I have classed together under the heading of the Baker drawing, and especially that by Miller in the Baskerville Milton, that I think it probable it may have had a connection, more or less remote, with the drawing in the possession of the Tonsons. In features it is wholly unlike any of the other portraits; and the form of the collar in all the prints I have here classed together differs from any of those we have been examining. The others are quite unworthy of Vertue's reputation; but some allowance must be made for an engraver pursuing his art at the age of 72.

105. Milton. G. Vertue, 1750. Portrait in a plain oval frame, resting on a pedestal, on the top of which are the engraver's name and date; at the top of the frame is a long narrow oval, surrounded with scroll and fillet, and inscribed with the name of Milton; published in Newton's edition of "Paradise Lost," 2 vols. 8vo, London, 1750, and again in 1778, and probably other editions. This may be the print referred to by Granger under the description of "Milton—oval—his name is "in capitals at the top—Vertue sc. 8vo." Bromley has copied Granger's description.

106. John Milton. G. Vertue sc. (the G and V blended in a manner not unusual in Vertue's prints). The lower part of the portrait shews a portion of an oval frame; the name on a panel beneath; appears in Tonson's edition of "Paradise Lost," 12mo, London, 1751.

107. John Milton. G. V. sc., 1756. The size and arrangments exactly like the preceding, but the features still more unsatisfactory. The monogram which I have transcribed as G. V. scarcely admits of description without a facsimile. The print appeared in one of the 12mo editions of "Paradise Lost," published with Fenton's Life.

108. John Milton. Ornamented and engraved by J. Chapman, 1804. Published by James Cundee. Prefixed to Evans's edition of "Paradise Lost," in two volumes small 8vo; an octagon, 2.4 × 1.9, surmounted by a dove, and with serpent, cross and other ornaments at foot; the portrait evidently copied from the preceding.

109. Milton. Engraved by Chapman. An oval, 1.7 × 1.3, forming a vignette to the engraved title to a small edition of the Poetical Works, published by Suttaby, in 1805, and furnishing a more pleasing version of the same portrait.

PORTRAITS DERIVED FROM BUSTS, MEDALLIONS, SEALS &c.

It is one of the disadvantages incident to the practice of the sculptor's art, that his services are frequently called into requisition for the purpose of conferring posthumous honor on those whose features can only be recalled by a comparison of extant portraits: and the result is that in portrait sculpture we look not so much for a literal rendering of the features of the original, as for a work of art, in which those features are impressed with the artist's idea of what is characteristic of the man. Whether any bust of Milton, from which the engravings now to be noticed have been taken, were from the life, is at least doubtful; but the considerations I have touched upon would render it unfair to class them on that account among pseudo-portraits.

Hollis's Bust.

In Hollis's Memoirs (p. 513) it is stated that "Mr. Hollis, in a paper "dated July 30, 1757, says, 'For an original model in clay of the head of "'Milton £9 12s., which I intended to have purchased myself had it not "'been knocked down to Mr. Reynolds by a mistake of Mr. Ford the "'auctioneer. Note, about two years before Mr. Vertue died he told me "'that he had been possessed of this head many years, and that he believed "'it was done by one Pierce, a sculptor of good reputation in those times, "'the same who made the bust in marble of Sir Christopher Wren which "'is in the Bodleian Library. My own opinion is that it was modelled by "'Abraham Simon, and that afterwards a seal was engraved after it in pro- "'file by his brother Thomas Simon, a proof impression of which is now in "'the hands of Mr. Yeo, engraver, in Covent Garden.'" A few lines further on it is stated that "the bust probably was executed soon after "Milton had written his Defensio pro populo Anglicano," and that "Mr. "Reynolds obligingly parted with this bust to Mr. Hollis for twelve "guineas." I infer from this that Mr. Hollis's own memorandum referred to the price at which the bust was sold to Reynolds. Warton states (p. 531 ed. 1791) that "Mr. Hollis bought it of Vertue" The inference from Hollis's memorandum, written in the year after Vertue's death, is that the latter had been the possessor before the sale at which it was knocked down to Reynolds. From this bust there have been various engravings:—

110. Milton. J. Richardson delin. G. Vertue sculpsit. A bust on a pedestal, decorated with serpent and apple, and the poet's name inscribed on the plinth.

The bust stands in a round-headed niche; and the entire plate measures 12 × 7.2; it appeared in the edition of Milton's Prose Works, 2 vols. folio, London, 1738; mentioned by Granger.

111. Milton. J. Richardson delin. G. Vertue sculpsit. The same plate, cut down a little above the spring of the circular head of the niche above mentioned, so as to reduce the size to 10 × 7.2, to adapt it to Baron's edition of the Prose Works, in 2 vols. 4to, London, 1753.

112. Milton. E. Verhelst fec. Mannheim. A small bust, unlike Milton in features, but indicating in costume and ornaments that it is intended for a copy of the preceding.

113. Iohn Milton, drawn and etched MDCCLX by I. B. Cipriani, a Tuscan, from a bust in plaister, modelled from the life, now in the possession of Thomas Hollis, F.R. and A.SS. An oval encircled with palm, uniform with the other Hollis portraits; and beneath, the sonnet to Cyriac Skinner:—

"Cyriac this three years day," &c.

It is mentioned by Grainger.

114. John Milton. Engraved by H. Meyer, from a drawing by Mr. Cipriani, in the possession of the Rev. Dr. Disney, published April 16, 1810, by T. Cadell and W. Davies. A representation of the same bust in profile; but whether from a drawing by Cipriani, as stated, or only founded on that made for the print last described, I am not aware.

115. Milton. Litterary Magazine. A representation of the same bust, probably copied from Vertue's print; size, exclusive of lettering, 3.5 × 2.8.

116. Iohn Milton. Literary Magazine. The same altered, and the title of the periodical corrected as above.

Richardson's Etchings.

117. MIΛTΩ (inscribed on the pedestal of a bust). J. Richardson f.; and beneath, the lines:—

"Forsitan & nostros ducat de Marmore Vultus,
Nectens aut Paphia Myrti, aut Parnasside Lauri
Fronde Comas, at ego Secura Pace quiescam. Milton in Manso."

Size of plate 9.2 × 5.8. This is an etching mentioned in the Memoirs of Thomas Hollis. At p. 514, the author—after introducing the subject of the Poems and Essays of Samuel Say, 4to, London, 1745—writes:—"Let us not forget for what purpose we "brought this gentleman upon the carpet. It is for the sake of a print of a bust of "Milton, prefixed to his second essay, which, if our judgment were asked, we "should call a good one: the execution is by Mr. Richardson, Sen.: it is from "Mr. Hollis' model in clay, ornamented by Richardson, and is one of his sets of "prints of Milton." Warton notices Mr. Hollis's bust, and says that "Richardson "etched it for the Poems and Critical Essays of S. Say, 1754, 4to," but adds, "I "believe this is the same etching that I have mentioned above to have been made "by old Richardson, 1734, and which was now lent to Say's editor, 1754, for Say's

"Essays: old Richardson was not living in 1754." (*Warton's Milton*, p. 531, ed. 1791.) It must be admitted that the resemblance between the etching of 1734 (No. 70) and that under discussion is so close in feature, attitude and costume, and even in the addition of the wreath, that the latter print would be more correctly described as a study of Richardson from his "excellent original in crayons," adapted to the form of a bust, than as a copy from Hollis's model in clay; but it is impossible that Warton could have compared the two etchings, or had more than the vaguest recollection of one while describing the other, when he expressed his belief that the two plates were identical. His argument, moreover, rests on an error in dates. Say's Poems and Essays were published, not in 1754, as thrice stated by Warton in the course of four lines, but in 1745, on the 6th of April in which year the preface is dated, while Richardson survived to the 28th of May following. The publication of Say's Poems and Essays was posthumous, the author having died in 1743; and a postscript acknowledges that "the subscribers "are obliged to Mr. Richardson for the fine head of Milton, prefixed to the Essay "on the Numbers of Paradise Lost, who lent the plate etched by himself, to be "used on this occasion." Granger's account of the print is that it "was done from "a bust which belonged to the painter that etched the print; the bust is said to "have been done from a mould taken from his face, and is indeed very like him." He adds in a note, that "the prints of Milton by Richardson are not common."

118. Milton (inscribed on the pedestal of a bust). Clark sc. A small vignette, enclosed in an abundance of foliated ornament; and probably a bad copy of the preceding.

119. MINTΩ. J. Richardson, 1738. A profile etching; in an oval 3.9 × 3.5; bearing no resemblance to any other portrait of Milton already noticed, but a considerable resemblance to Richardson's profile etching of Pope. Richardson's tendency to reproduce in portraiture the features of other portraits from his own hand is very remarkable; and, but for the close resemblance which his etching of 1734 bears to the features in Simon's mezzotint, would be sufficient to destroy all confidence in the former even as an ideal portrait. I have placed this print in its present order from its apparent resemblance to a drawing from a medallion: but I am not aware of any from which it can have been taken. It is mentioned by Granger and Bromley. The original drawing is probably one described by Malone, (*Prior's Life of Malone*, p. 307, 309,) as being in profile, and marked "13th "February 1737 R." This and another of Milton, "4th December 1734 R.," and six other drawings by Richardson, were bought at the sale of his drawings in 1746–7 by his son, at whose sale in 1772 they were bought by Mr. Parsons, a picture cleaner, who sold them to Malone. The literary connection between Malone and the younger James Boswell renders it probable that these were the "two beautiful "pencil drawings of vellum, by the elder Richardson, portraits of Milton," which formed lot 3206 at the sale of Boswell's library in 1825, and sold for nineteen shillings.

120. Anon. A profile in oval; strongly resembling the preceding, but clothed, and with collar in the style of the White-Richardson drawing.

121. Milton. F. P. The initials, as we are informed by Granger, are those of Francis Perry. He was a pupil of Richardson. The etching, which is in profile, is a copy of the last but one, but reversed.

Milton victorious over Salmasius.

122. Anon. I. B. C. I. F. MDCCLXVII. Life of M. by I. T., ed. II, p. lxxx. A quarto plate, representing a terminal bust of Milton, copied from Hollis's bust above described; on the face of the term is a volume lettered "Def. pro pop. "Anglic."; and beneath, a palm branch, from which is suspended a medallion representing, as we are informed below, Salmasius; mentioned by Granger and Bromley. The history of the print is given in the Memoirs of Thomas Hollis. At p. 371, after mentioning a projected edition of Milton's Prose Works, which became abortive in consequence of a misunderstanding between Mr. Hollis and Miller, the publisher, it is stated that "some time before this transaction Mr. Hollis had "settled with Mr. Cipriani, much as he said to his satisfaction, the sketch of a "print representing Milton victorious over Salmasius, which he undoubtedly "intended for a frontispiece to the projected edition of the Prose Works just men-"tioned. He did not, however, countermand this print upon his disappointment, "observing that it might serve for some future edition of those works." In a subsequent passage (p. 383) the author proceeds to say:—"We have mentioned above "that Mr. Hollis had, in concert with Cipriani, settled the sketch of an emble-"matical print representing Milton's victory over Salmasius. On the 13th of "January [1768] Mr. Cipriani brought him a finished drawing from that sketch, "for which Mr. Hollis paid him five guineas, and presented him with two more on "account of the masterly execution of it. It was agreed between them at the same "time that Cipriani should make an etching from that drawing, which was done, "and a proof brought to Mr. Hollis by Cipriani March 5, for which the artist had, "as the price of his ingenuity, twenty guineas, and five more as a present."

123. Anon. I. B. C. I. F. MDCCLXVII. J. Hopwood s. A reduced copy of the preceding; 4.4 × 3.2; the volume and palm branch being superseded by a fillet, inscribed with the words "Defensio secunda," from which the portrait of Salmasius is suspended; prefixed to the third volume of the works of Archdeacon Wrangham, 8vo, London, 1816.

124. John Milton. The same plate, altered by the erasure of the fillet and portrait from the face of the term, and the substitution of the Poet's name; and beneath, in odd conjunction, the words "Do fermented liquors contribute to intel-"lectual excellence?"

Ryebrack's Monument.

125. Milton. H. Gravelot delin. Nathl. Parr sculp. The name inscribed on the pedestal of a bust, the history of which is given on a panel below, namely:—

"In the year of our Lord Christ one thousand seven hundred and thirty seven "This Bust of the Author of Paradice Lost was placed here by William Benson "Esquire one of ye two Auditors of the Impress to His Majesty King George the "Second formerly Surveyor General of the Works to His Majesty King George the "First. Rysbrack was the Statuary who cut it." This is the marble bust in Westminster Abbey. It is stated in Hollis's Memoirs to be after his plaister bust and the Faithorne drawing in the possession of the Tonsons, but chiefly the latter. The print is a folio 12 × 7.5.

126. The monument of the celebrated John Milton as it now stands in Westminster Abbey. Drawn by Hamilton. Engraved by Thornton. A reduced copy of the preceding in 8vo.

127. Johannes Miltonus. M. Rysbrachius marm. sc. pro Gul. Bensono, arm. G. Vandergucht 1741, 4to. The above description is extracted from Granger. The print is mentioned also by Bromley, but I have not happened to meet with it.

Miscellaneous Busts.

128. Milton. Engraved by W. Ridley, from a drawing taken from a bust in the possession of the proprietor; printed for C. Cooke, 1800; in Cooke's edition of Select Poets. I know nothing of the bust from which this purports to be taken.

129. Anon. A miniature bust, somewhat resembling the preceding.

130. Milton. Richd. Smirke delt. Abr. Raimbach sculpt. Published by Johnson & Co, 1810, as a frontispiece to Cowper's Milton. A terminal bust, differing from all the other likenesses; standing on a circular pedestal, against which is reared a medallion of Cowper.

Medallions.

131. Iohannes Miltonus. J. Hulett del. et sculp. A 4to plate in Peck's Milton, representing the obverse and reverse of a medal; obverse, Iohannes Miltonus. Tanner f. Reverse, E. Marmore in Ecclesia Sancti Petri apud Westmonasterium erectore Gulielmo Bensono arm. Anno salutis humanæ MDCCXXXVII. Rysbrachius sculpsit; beneath, the quotation from the Odyssey:—"Τὸν περὶ Μοῦσ' "ἐφίλησε," &c., and the dedication "Viro ornatissimo Gulielmo Bensono arm. "Miltoni sui Tabulam hanc merito votivam D.D.D. Francus Peck, A.M." This medal was struck at the expense of Mr. Benson, and given, as stated by Dr. Joseph Warton in a note to his brother's edition of the minor poems (p. 362, ed. 1791), as prizes for the best verses that were produced on Milton at all our great schools.

132. Ioannes Miltonus. Guls. Green, Jun., delin. J. Wood sculp. A profile forming a medallion vignette, 2.1 in diameter in the title page of Dobson's Latin Translation of the Paradise Lost, 2 vols. 4to, London, 1753; stated by Granger to have been engraved from a medallion which was done after the head on his monument by Rysbrack, and resembling that or Hollis's bust.

133. Ioannes Milton. Engraved in outline from a medal; obverse, the head, apparently designed chiefly after the type of the White portrait; reverse, the Temptation, partly surrounded with fillet inscribed "Dira dulce canit alter Homerus;" in the exergue the initials J. D.

134. Anon. A. Smith, A.R.A. sc. A medallion in profile, forming a vignette in title page to an edition of Paradise Lost published in 12mo by Sharp, 1809.

135. John Milton. Chas. Heath sculp. Published by J. Mawman, &c., 1817; a medallion in profile.

136. English Poets. Ten medallion heads ranged on the side of a representation of Mount Parnassus. R. Smirke del. J. Newton & J. Landseer fecit. Medallions per J. Newton. Folio: the head of Milton, though in the form and style of a medallion, is copied from the Faithorne portrait.

Seals.

137. Milton. W. W. Rylands sc. From a drawing of Mr. Deacon, taken from an impression of a seal of T. Simon * in the possession of Mr. Yeo. This seal is referred to in Hollis's Memoirs, in a passage already quoted in relation to Hollis's bust, with which it is stated this agrees; but I confess I can see no resemblance. The print is mentioned by Bromley, and with approbation by Granger.

138. Milton. From an impression of a seal of T. Simon, in the possession of Mr. Yeo. In the only copy I have happened to meet with, a worn plate appearing in an edition of the Poet's works published by J. Smith, High Holborn, 1830, a close inspection detects traces of the words "engraved by" beneath the oval to the left, and a name to the right which I am unable to decipher. Granger mentions a print which he describes as "Milton: from a drawing of Mr. Deacon taken from "an impression of a seal of T. Simon, in the possession of Mr. Yeo" Query whether this description is intended for the present print, or for either of those next to be described.

139. Milton. T. Holloway, sculpsit. From an impression of a seal of T. Simon, in the possession of the late Mr. Yeo; published August 15, 1801, by J. Mawman, &c.

140. Milton. R. R. Romnery sculp. A close and well executed copy of the preceding. I am told it is a rare, if not an unpublished print.

PRETENDED PORTRAITS.

The Cooper Miniature.

In proceeding to treat of those engraved heads, published with the name of Milton, the history of which I do not consider satisfactorily authenti-

* Mr. Hollis is stated to have had a small steel puncheon of Milton's head, a full front, for a seal or ring, by the same T. Simon, who did many more of Milton's party in the same way. I have been favored by Albert Way, Esq., with an impression in wax from a steel puncheon answering this description and admirably executed.

cated, the first rank is fitly occupied by one which, if the test I had adopted had been public acceptance, I must have placed among the authentic portraits: for none of those which will remain to be described have been so often or so well engraved as that which goes by the name of the Cooper miniature. It was bought for one hundred guineas, in 1784, by Sir Joshua Reynolds, from a picture dealer named Hunt, who "had "obtained it from a common furniture broker, who could not remember "the time nor manner in which he came by it." (*Northcote's Life of Reynolds, 4to ed., p.* 319.) It was marked "S.C. 1653"; and on the back was written, "This picture belong'd to Deborah Milton who was her "Father's Amannuensis at her death was sold to Sr Willm Davenants "Family.* It was painted by Mr. Sam. Cooper who was painter to Oliver "Cromwell at at ye time Milton was Latin Secratary to ye Protector. The "Painter & Poet were near of the same age. Milton was born in 1608 "& died in 1674. Cooper was born in 1609 & died in 1672 & were "Companions & friends till Death parted Them. Several encouragers and "Lovers of ye fine Arts at that time wanted this picture, particularly Lord "Dorset† John Somers Esq.‡ Sr Robt Howard Dryden Atterbury Dr. "Aldrich & Sr John Denham." It was mentioned in the first edition of Warton's Milton in the following year (p. 546); and the publication of the second edition of that work in 1791, with some additional remarks (p. 532) suggesting the resemblance of the likeness to a portrait of Selden in the Bodleian, gave rise to a letter in the Gentleman's Magazine of 20th May, 1791 (vol. lxi, p. 399), impugning the authenticity of the portrait, and written, as Todd informs us (and see also *Nichols' Lit. Anec.* IX, 67), by Lord Hailes. The letter was answered on the 15th of June (p. 603) under the signature of "R. J.," which indicated no less a personage than Sir Joshua himself: and indeed the answer is avowed by his biographer Northcote, and printed by him in extenso (p. 320). A reply appeared in

* Sir William Davenant's name had, shortly before Sir Joshua Reynolds' purchase, been before the public in connection with the history of the Chandos Shakespeare, of which a copy had been made by Sir Joshua himself. (See *Boaden on Shakespeare portraits, p.* 40.)

† See note on Vertue's letter to Christian, *ante*. Warton notices that this may have been the picture to which Prior's recollection was to be called, as having been in Lord Dorset's collection.

‡ Mr. Keightley (p. 133) prints "Lord Somers, Esquire," with "(sic)" to indicate that there is no typographical mistake; but he does not mention that he has examined the original miniature; and Miss Watson's engraving has the inscription as quoted in the text.

the Gentleman's Magazine for October (vol. lxi, p. 885); and in the following month Sir Joshua made his will, leaving "the miniature of Milton by "Cooper" to the Rev. Wm. Mason, who in a letter printed in Sir James Prior's recently published Life of Malone (p. 193) stoutly maintained the genuineness of his acquisition, gutta serena and all. By his will in 1797, after providing for the editing of his works by Willm. Burgh, Esq., LL.D, of York, he desired him for such friendly trouble to accept the fine miniature picture of Milton, painted by Cooper, which was bequeathed to the testator by Sir Joshua Reynolds. (See *Hunter's South Yorkshire*, II, 169, quoted in *Gent. Mag. for July*, 1831.) The controversy is too lengthy for our purpose; but the arguments may be shortly condensed. Lord Hailes shews the impossibility of reconciling the facts stated in the memorandum with the known date of Deborah Milton's death; and points out how irreconcileable any date is with the list of names given, and which he asserts to have been set down at random. It may be sufficient to mention that Sir John Denham died several years before Milton. Sir Joshua considered that the memorandum had been written before 1693, when Mr. Somers was knighted, and it had been admitted in an inscription on an engraving which will presently be described, that the writer of the memorandum had been mistaken in supposing Deborah Milton to be then dead. He quotes the authority of Mr. Tyrwhitt, to whom the miniature had been shewn at the Archbishop of York's table, for stating that "the orthography as well as the colour of the "ink shewed the memorandum to have been written about a hundred "years since;" and restates the case for the authenticity of the picture, by saying its "progress seems to be this:—Milton dying insolvent, and "Deborah Milton of course in great indigence, it is very improbable that "she would keep to herself a picture of such value; it was therefore sold, "as we suppose, to the author of the memorandum; and the account there "given is probably such as he received from the seller of the picture, who, "in order to raise its value, boasts how many great men had desired to "have it." Lord Hailes replies to the argument as to the *orthography*, by which he assumes the writer to mean *false spelling*, that the only words misspelt are "amannuensis" and "secratary"; and challenges Mr. Tyrwhitt to say whether such spelling was in use a hundred years ago, or whether a son of Sir William Davenant would so have written them; and suggests the question whether the phrase "fine arts" was used in English so early

as 1693. He denies, on the authority of the testamentary papers which had just been brought to light, that Milton died insolvent, and argues that before we can suppose Deborah to have sold the picture, we must suppose her to have been possessed of it, whereas she was living apart from her father for several years before his death; and even if she had been possessed of it, and left in extreme indigence, she would not have been likely to retain it from 1674 to 1693 and then part with it. We may fairly sum up this portion of the argument by observing that while on the one hand the most perfect consistency in the facts stated in an unauthenticated memorandum, on a picture passing under such suspicious circumstances through the hands of a broker, would only prove the possibility and not the truth of the statement, a mistake in important facts is fatal to its authority, and justifies us in treating it as a fabrication. It may be added that Deborah Clarke expressly told Vertue that she knew of no other picture of her father than the two in the possession of his widow, having been several years in Ireland, both before and after his death. But abandoning the evidence of the memorandum, there remains the internal evidence of the picture itself. On this subject Sir Joshua Reynolds is entitled to be heard with respect, though with large allowance for his evident disinclination to believe he had been duped, and his eagerness to maintain a foregone conclusion arrived at on insufficient external evidence. He had told Warton that "the picture was admirably painted, and with such a character of "nature that he was perfectly sure it was a striking likeness—he had now "a distinct idea of the countenance of Milton which could not be got from "any of the other pictures which he had seen." Under his assumed initials of "R. J." he says:—"The opinion of Sir Joshua Reynolds in "matters relating to his own profession certainly ought to have some "weight. He is not likely to be wanting in that skill to which every other "artist pretends, namely, to form some judgment of the likeness of a "picture without knowing the original. * * * Without being an "artist it is easily perceived that the picture of Faithorne does not possess "that individuality of countenance which is in the miniature. * * * "There is no doubt but that Milton sat to Faithorne for that crayon "picture: the distinguishing features are the same as in the miniature— "the same large eyelid—the same shaped nose and mouth—and the same "long line, which reaches from the nostril to below the corners of the "mouth—and the same head of hair: but if the effect and expression of

" the whole together should be, as in fact it is, different in the two pictures, " it cannot, I should think, be difficult for us to determine on which side " our faith ought to incline, even though neither possessed any strong " marks of identity." The engravers have furnished ample opportunities for examining the lineaments of this much contested portrait.

141. Anon. Oval, 2.5 × 1.9 within the frame, in front of a curtain and pyramid; on the two exposed sides of the base are bas-reliefs representing the Expulsion and the Temptation; reared against the front an oval representing the back of the miniature, with the memorandum above quoted; and, below, the following inscription :—" The above is a fac-simile of the manuscript on the back of " the picture which appears to have been written some time before the year 1693 " when Mr. Somers was knighted, and afterwards created Baron Evesham which " brings it within nineteen years after Milton's death. The writer was mistaken " in supposing Deborah Milton to be dead at that time: she lived till 1727, but in " indigence and obscurity married to a weaver in Spitalfields. I have only to add " that Cooper appears to have exerted his utmost abilities on his friend's picture, " and that Miss Watson has shewn equal excellence in this specimen of her art. " The likeness to the original picture which is in my possession is preserved with " the utmost exactness. J. Reynolds." Published January 4, 1786, by Caroline Watson: mentioned by Bromley.

142. Milton. Engraved by Caroline Watson, 1808, from a miniature by Cooper. Oval; same size as above; published January 20, 1808, by Richard Philips.

143. J. Milton. Né en 1608, Mort en 1674. Reynolds pinx. Boutrois sc. 3.9 × 3.1. Sir Joshua Reynolds's connection with the picture suggests the origin of the mistake as to the painter.

144. Iohn Milton. Augsburg, by John Elias Haid; mezzotint; oval, 6 × 4.6 within the frame.

145. John Milton. Cooper del. Cochran sc., published in Bohn's edition of Milton's Prose Works, vol. I.

146. Vignette to the edition of L'Allegro and Il Penseroso, illustrated by Birkett Foster. The description states broadly that " this portrait was formerly in the " possession of Milton's daughter Deborah: it then passed into the hands of Sir " William Davenant, and subsequently into those of Sir Joshua Reynolds."

Du Roveray's Print.

147. Milton. Engraved by William Sharp, after an original miniature by Samuel Cooper: the ornaments by G. B. Cipriani and E. F. Burney. Oval, 3 × 2.4, surrounded with wreaths, &c., in front of a truncated column, against the base of which is an oval vignette representing the Temptation. Published in Du Roveray's edition of Paradise Lost, 1802.

If nothing can be found in common between this and Miss Watson's engraving, I presume the explanation must be that the name of Cooper, having been once brought into connection with Milton portraits, has been treated in the same manner as that of Faithorne, and is intended to assist the portly gentleman, whose features are here represented, in personating Milton.

Craig's Drawing.

148. John Milton. Drawn by W. M. Craig, Esq., from a miniature by Cooper. R. Hicks sculp. Oval, 3.2 × 2.6, with serpent and apple, and other ornaments. Published by Nuttall, Fisher and Dixon, Liverpool, March 30, 1812. The same observations apply to this as to the preceding.

Peck's Mezzotint.

This impudent attempt to foist upon the public a pretended portrait of Milton appeared in Peck's Memoirs in 1740. He describes it at p. 103 as "a picture, an half length, drawn when he was about five and twenty." "The original" he says "was once the property of Sir John Meres, of "Kirby Belers, in com. Leic., kt., but is now mine and you have a good "print of the head prefixed to this work. However as the plate exhibits "the head only, and as no engraving can express the colouring of the "complection and drapery, and perhaps something of the features, I "shall here add a short description of the whole. Milton is here drawn "sitting in a red velvet chair in a russet coloured nightgown lined with "blue." He then proceeds with a minute description of the dress, and concludes by saying:—"His left hand lying over an open book on a table "covered with a loose red velvet table cloth: the open dexter leaf of the "book numbered p. 30: and on the edge of the book a label inscribed "Paradice Lost, with a *c* not an *s*—as he often wrote it." Will it be believed that this book is the sole pretext for attributing the portrait to Milton? Some one has observed that on similar grounds, if the volume had been the Book of Genesis, Mr. Peck would have supposed the portrait to be that of Moses. But he did not err from ignorance: for having asked Vertue whether he thought it a picture of Milton, and being peremptorily answered in the negative, Peck replied "I'll have a scraping from it "however and let posterity settle the difference." *(See Warton p. 545, Ed. 1785.)* Vertue himself told the story to Hollis in 1755. *(See Hollis's Memoirs 513, 529.)* Posterity has long since "settled the difference" not much to Mr. Peck's credit.

149. Iohannes Miltonus; circa annum ætatis xxv^{m}. J. Faber fecit. Cedite Romani Scriptores, cedite Graii, (Propert.) Viro ornatissimo Cuthberto Constable de Burton Constable in com. Ebor. Tabulam hanc merito votivam D.D.D. Francus Peck A M. An oval representing a young man of about the age stated, with flowing bushy hair and moustache, dressed in a gown and short shirt collar open at the throat; size, exclusive of lettering, 6.8 × 5.8; mentioned by Granger and Bromley.

The Elderton Miniature.

In January, 1791, the Rev. J. Elderton, of Bath, announced to the world in the columns of the Gentleman's Magazine, the existence of a miniature picture of Milton in his possession. He states that "it "belonged to his child's great ancestor Sir Edward Seymour, who was "speaker of the House of Commons, and grandfather of the Duke of "Somerset: it has been seen by connoisseurs, who always agreed it was "an original: the hair is of a dark chesnut colour, flowing down to the "shoulders." *(Gent: Mag. v.* lxi, *p.* 39.) Perverse individuals having ventured to hint a doubt of its genuineness, though vouched by so aristocratic a pedigree, Mr. Elderton settled the question by forwarding the outlines of the miniature for the purpose of the engraver: and this curious addition to the engraved portraits of Milton accordingly appeared in the Gentleman's Magazine for January, 1792:—

150. Picture supposed to be Milton. Oval, 4.3 × 1.8, forming one of a page of illustrations to the Gentleman's Magazine; B[asire] sc.

Vertue's Richardson Portrait.

151. Ioannes Milton, ætat. 42. Ex musæo J. Richardson. G. Vertue, Sculpsit, 1751. An oval, the frame of which terminates at the base in a foliated scroll, in which is inserted a panel, with name and age as above, and at the top lightning, serpent and apple, &c.; size of plate 8.6 × 6.

This plate, which appeared in Newton's edition of Paradise Regained, 4to, London, 1752, and is mentioned in Granger and Bromley, and in the memoirs of Thomas Hollis, (p. 117), represents a person about the age stated, dressed in gown and falling or Genevan band, with flowing hair and slight moustache. There can be no hesitation in classing it among the pseudo-portraits, though I regret so to treat an engraving inscribed with the name of the conscientious Vertue. I know nothing of its history beyond what I have stated. Richardson died six years before the date of the print, as I have mentioned in speaking of the etching published in Say's Poems and Essays, (No. 117.)

The Chesterfield Portrait.

152. John Milton. From an original in Lord Chesterfield's collection. Cook sculpt. Printed for John Bell, Nov. 12, 1777. Oval; portrait of a young man of from 20 to 30, with moustache, &c., his head leaning on his hand in an attitude of thought; name on a panel below.

153. John Milton. From an original in Lord Chesterfield's collection. Cook sculpt. Slightly differing from the preceding and distinguishable by the panel having square instead of rounded ends.

154. John Milton. In an edition of Paradise Lost, published by Law, Millar and Co., London, 1792; a copy of the preceding, but with broader and coarser features.

The Strawberry Hill Portrait.

155. John Milton. S. Harding del. E. Harding, Jun., sculpt. From an original picture in the collection of Lord Orford, at Strawberry Hill. Published Dec. 1, 1796, by E. & S. Harding, Pall Mall; 4to.

The print is a half length portrait of a gentlemen of from 30 to 40 years of age and light complexion; in cavalier costume, apparently of black velvet; with pointed beard and moustache. The same plate, published without date by Evans of Great Queen Street, figured as a portrait of Sir William Killigrew, "Vandyke pinx." being substituted for "S. Harding del." If the latter account of the picture have any better evidence in its favor than the former I have no objections to offer, unless it represent a man older than 36, which was the age of Killigrew at the date of Vandyck's death in 1641. The sale catalogue of the Strawberry Hill collection has no mention of any portrait of Killigrew; but lot 7 in the 21st day's sale is described as "a portrait of Milton," without a word to identify or trace the history of the picture. In the catalogue of Portraits in the Manchester Art Treasures' Exhibition is one, numbered 105, (lent by the Duke of Newcastle) of "Sir William Killigrew; half length, in "black; signed 'A Van Dyck pinxit 1638.'" I had not then any reason for taking especial notice of the picture; but I am told it corresponded with the print.

The Capel Lofft Portrait.

This is a folio engraving from a picture in the possession of Capel Lofft, who in the preface to his edition of the Paradise Lost, published at Bury St. Edmunds in 1792, in describing the edition of 1674, with the portrait by W. Dolle, says:—"Whatever harshness there may be in the style of

"the engraving, even to a degree of rudeness, there appear strokes of "a characteristic resemblance. It seems to me to be from an original "which was bequeathed to my father by Col. Holland, on which lines "of Latin verses were inscribed beneath the scroll; *Inclytus et Fœlix* "*Patriam* can be pretty plainly traced: the rest is lost, and I fear irre-"coverably. Mr. Stevenson of Norwich had this picture to copy, as he is "always warm in the interests of genius and humanity." I cannot imagine what possible relationship Mr. Lofft could trace between this portrait and Dolle's, which is a copy, and not a very unfaithful one of Faithorne's Engraving. With the latter however Lofft appears from other passages in his preface to have been unacquainted. To those who can believe that the portrait now under discussion represents Milton at all, the fact that Peter Vander Plas, to whom it is attributed, died in 1626, when Milton was 18 years of age, will probably present a minor difficulty. The figure appearing in a beam of light entering at the upper right hand corner of the engraving, and probably representing the Risen Saviour, may have suggested the idea of the portrait being that of the author of Paradise Regained. This emblem and the Pilgrim's staff and bottle, which form so prominent an object in the print, would be equally appropiate to Bunyan, to whom the features bear, at least, as much resemblance as they do to Milton; but if Vander Plas was the painter, this suggestion is as impossible as the other; and for our purpose the question of who the original was is of little importance if he was not Milton. The engraving may be described as:—

156. Milton. P. V. Plas fecit. Drawn and engraved by G. Quinton, from an original picture in the possession of Capel Lofft, Esq. Published August 1st, 1797, by W. Stevenson, Norwich, for G. Quinton, engraver, and sold by Messrs. Boydell. A rectangle 8½ × 7 inches. Below the figure is a scroll, showing in a legible state part of the Latin words quoted by Mr. Lofft; and below, in rude Roman letters, P.V. PLAS Fec.

157. Milton (from a picture by Plas.) Drawn on stone by M. Gauci, Esq. Printed by F. Moser. An enlarged copy in folio of the head from the preceding print.

Portrait in Dr. Williams's Library.

158. John Milton. Drawn by J. Thurston. Engraved by J. T. Wedgwood, from a picture by Dobson in Dr. Williams's Library. London, March 1, 1820, published by W. Walker. A coarse featured, heavy looking man, of middle age, with flowing hair and broad Genevan band, but no trace of Milton's features. The

original picture, of the history of which nothing is known at the library, is not quite so repulsive as the engraving.* Todd mentions the name of Dobson in connection with another portrait which has also been attributed to Riley.

Pye's Print.

159. John Milton. Painted by C. Janssen! Engraved by Charles Pye. London, published for the proprietor, March 1823. The print represents a young man, of upwards of 20, in a lace cravat of the time of Queen Anne. I am not aware in what publication the engraving appeared—probably some general biographical work: for I have met with uniform portraits of Locke, Louis xvi, Pitt, Sydney, Thurlow, Washington &c.

Page's Print.

160. Milton. Engraved by R. Page from an original painting. In a suspended frame with ornamental corners. I know nothing of its history; and its importance is not such as to challenge much enquiry.

The Falconer Miniature.

The history of this portrait is contained in the pages of Notes and Queries. In vol. II, 2nd series, p. 231, Mr. Jones, of Nantwich, had mentioned a tradition that one of the two pictures enumerated in the testamentary inventory of the effects of Milton's widow had passed on her decease to a young Oxonian student named Wilbraham, of Townsend, in Nantwich. The evidence already given identifies Mrs. Milton's pictures with the Janssen and Onslow portraits too clearly to leave room for belief in the tradition referred to by Mr. Jones: but his note gave rise to another from Thomas Falconer, Esq., of Usk, printed at p. 303 of the same volume, in which he states that the exquisitely finished portrait of Milton, from which the engraving was made which is published in the series of portraits of the Society for the Diffusion of Useful Knowledge—a

* Since the reading of the paper, I have met with a small volume, entitled "Effigies "Poeticæ; or, The Portraits of the British Poets, illustrated by Notes, Biographical, "Critical and Poetical," London (Carpenter) 1824, which appears to be a reprint of the letter-press descriptions accompanying a series of engraved portraits. "No. 56, John "Milton, from a picture by Dobson in Dr. Williams' Library," surely refers to the present portrait, but the estimate there given of its merits is very different from that above expressed. "We have here given," it says, "a resemblance of Milton which has never "before been made public. It is as well authenticated, perhaps better, than such pictures "usually are: but it fails in some few respects, like all others. Nevertheless, there is "something characteristic in it. There is an approach to sweetness and majesty, (both "of which Milton possessed in no common degree,) that we do not recollect elsewhere. "The eye-brow is contracted, like that of a thinker; the glance is penetrating, yet raised; "the mouth wears a sweet expression: and the hair flows down upon the shoulders, and "gives a massy character to the whole that is not without its grandeur."

painting on vellum—belonged to his grandfather, a son of Mr. Falconer, recorder of Chester, whose wife was born in 1703, and was a daughter of Mr. Wilbraham of Townsend. He adds, however, that he knows of no fact to identify this miniature with the portrait mentioned by Mr. Jones; and states his belief that it was never in the possession of the Wilbraham family. Mr. Falconer's history of the miniature offers no ground for animadversion; but contains nothing to connect it with Milton: and the Society which publicly adopted it as a portrait of him may share with their publisher the credit of having diffused the useful knowledge that their engraving is "from a miniature of the same size *by Faithorne! anno* "1667!!" To judge from the engraving, Mr. Falconer's praises of the miniature, as a work of art, are well deserved; but the young gentleman it represents had certainly not numbered half of Milton's years at the date attributed to it, and, when Milton was of the age there represented, Faithorne was in his boyhood: nor was he at any period of his life a miniature painter. If therefore the above name and date are found on the miniature, they are a clumsy forgery; but it is not stated by Mr. Falconer that there is any lettering on it. Faithorne, as we have seen, is the common vouchee of Milton portraits; and the date of 1667 may have been suggested by Pickering's engraving of 1826 (No. 82) in which, as I took occasion to explain, the figures had no reference to the date of any picture. The engravings are as follows:—

161. John Milton. Engraved by T. Woolnoth from a miniature of the same size by Faithorne, anno 1667, in the possession of William Falconer, Esq. An oval, 2·6 × 2·1, within a shaded rectangle. Published under the superintendence of the Society for the Diffusion of Useful Knowledge.

162. John Milton. Engraved by Samuel Freeman from a miniature by Faithorne, anno 1667. Published by Archibald Fullarton & Co., Glasgow; in Cunningham's Lives of Eminent and Illustrious Englishmen, 8 vols. 8vo, Glasgow, 1835-7; an enlarged copy from the preceding.

163. John Milton. No name of engraver; rectangle, 2·6 × 2·1; a close copy of the society's print.

164. Milton. No name of engraver; rectangle, 2·1 × 1·6; in the same plate with Barrow, Pope and Defoe; published by Routledge & Co.; in Knight's Half-hours with the best Authors.

I have now exhausted my list of portraits, having purposely excluded several prints which seemed to me scarcely to come under that denomination,

such as Vertue's plate of Milton between Homer and Virgil, mentioned by Granger—Sant's imaginary portrait—Faed's large print of Milton in his study—and various others, in which he is represented as dictating to his daughter, or acting in the imaginary character of amanuensis to Cromwell. I have also abstained from inserting an etching by Hollar, of extreme rarity, of which there is a copy in the print room of the British Museum, going by the name of Milton. It represents a very youthful bust, which I can imagine no reason for supposing to be Milton; and as it is unlettered, we have no right to class it among pseudo-portraits. That I have made some mistakes, and more omissons, I am prepared to find: but if my paper should receive the honor of being printed, it may serve as a text for the reception of additional information and corrections, which may enable me at some future period to reproduce it in a more perfect form. In the meantime, that I may not be guilty of any wilful omission, I conclude my list by enumerating a few prints, which I have found mentioned in various catalogues, &c., but which I have not had an opportunity of describing. Granger mentions "John Milton; a square print with a label under the "head, G. Vandergucht sc. neat;" and Bromley mentions it in similar terms. Wivell (*Portraits of Shakespeare p.* 234) mentions a print by Faber on a half-sheet with Shakespeare, Ben. Jonson and Samuel Butler, being one of the series published by John Bowles (See observations above on Simon's copy of the Faithorne print, No. 29: both Simon and Faber seem to have been employed on Bowles's series; and in some instances the same author appears engraved by both). Rodd's Catalogue of British Portraits, 1812, mentions an 8vo print by Coster: and Evans's Catalogue describes a 4to print of Milton at four different ages; a rare print 12mo by Phinn; and a folio by Gunst. Some of these may turn out to be prints already noticed, but which, for want of lettering, I have been unable to identify.

From the account I have given of the number of existing portraits, mediately or immediately derived from a very few originals, it results that many having some claim to authenticity are probably still in existence. The history of the Janssen portrait happily needs no discussion; and I hope the doubts as to the recent history and present deposit of the Onslow portrait will shortly be set at rest. No mention has ever been made of any drawing for the purpose of the Marshal print. Faithorne's original, assuming it to have been the crayon drawing of which we have heard so

much, is last heard of in the possession of the Tonsons: for I must maintain, until actual inspection satisfies me to the contrary, that the idea of its having passed to Mr. Baker has arisen from confounding it with a copy from the White drawing, or Richardson's "excellent original in crayons." The copy so made may, perhaps, be yet in the collection at Bayfordbury; and the subsequent copies from it by Simpson for the engravings of Baker, Collyer and Dean are probably in the possession of the publishers of Todd's Milton. The "excellent original" itself, and the copy which I have conjectured to have been made from it for Vertue's 1750 engraving, are not traced beyond the Tonsons, nor, with certainty, even to them. Vertue's drawing for his 1725 engraving is traced by the inscription on Gardiner's print in Boydell's Milton (No. 79) to the possession of Mr. Brand Hollis; and I hope it is still in the worthy custody of the inheritor of his literary treasures. The various drawings by Cipriani may be looked for in the same place; but I should be inclined to assign to them a much lower value. The drawing for Vandergucht's engraving (No. 89) has not been mentioned as having been preserved. Of Richardson's drawings many are probably in existence. Various others of the prints above described may possibly have been engraved from drawings taken specially for the purpose.

I have avoided any discussion of the subject of original pictures and drawings, except such as necessarily arose out of my treatment of my subject; but a few lines may properly be devoted to the mention of such as I find noticed in the various works I have consulted. Some of them may be drawings the probable existence of which I have just been speculating on; and others would only swell the list of pseudo-portraits; but even these may in some cases have been the subject of engravings which have escaped my notice, and on that account should be mentioned here to reduce the risk of accidental omission. It will require strong evidence to establish the authenticity of any beyond those I have mentioned; and nothing but internal evidence can now be expected. The strongest case likely to be made out, so far as I have at present the means of judging (for I have not yet seen the picture), is one which has been kindly brought under my notice by Albert Way, Esq., whose ready help I should be most ungrateful if I did not warmly acknowledge. It is at Capesthorne, the seat of Arthur Davenport, Esq., by whose father it was bought at Lady Holland's sale, at Christie's, and was brought from Ampthill soon after

her death. It is inscribed IOHANNES MILTON EFFIG^{S} ANNO SAL^{S} MDCLXXIII ÆTATIS 65, and bears the name of Riley as the Painter inscribed on a stone pilaster. These particulars are from information obtained for me from the family by Mr. Way, who describes the picture, as a painting, with admiration, and as bearing the stamp of authenticity. It represents the poet blind, and caressing his dog. The name of Riley is mentioned by Todd in connection with a portrait for which he expresses his obligations to a Mr. Charnock, and says it "has been "affirmed by some to have been a portrait of Milton by Dobson, but con-"jectured by others to have been a performance of Riley, who lived rather "too late to delineate Milton.* Some have supposed it may be a head of "his brother Christopher. It is, however, remarkable that Mr. Greenslade, "a collector of paintings, who resides in Bond Street, London, has a copy "of the very painting, which has been called a portrait of the Poet." An alleged miniature of Milton when young, which Warton mentions as in the possession of the Duchess of Portland, and describes as "having a face of "stern thoughtfulness, and to use the poet's expression, severe in youthful "beauty," was sold, along with an alleged miniature of his mother, at the sale of the Portland museum, in 1786, for £34. (See *Gent. Mag.*, 1786, p. 527; *Todd's Milton*, I, p. 143, 146, ed. 1809.) In the same note Todd states that "at West Wycomb Manor House, in Buckinghamshire, there is "a fine portrait of Milton, supposed to be an original," (see *Langley's Hist. and Antiq. of the Hund. of Desborough*, p. 417,) and that "Mr. Waldron "is in possession of a painting which exhibits a likeness of the Poet in his "middle age." Mr. Mitford writes, "I once knew a portrait of Milton at "Lord Braybrooke's, Audley end, in the gallery (with a beard): I also saw "one of him when young at Lord Townshend's, at Rainham; but many "years have passed, and I cannot recollect any particulars. Charles Lamb, "Esq., possesses an original portrait,† left by his brother, and accidentally "bought in London. * * * I have heard that an original portrait of "Milton (about thirty years of age) has been discovered by Mr. R. Lemon "of the State Paper Office." (*Pickering's Aldine Milton*, p. xc, n.) An oil

* He was born in 1640.

† Mr. Cunningham mentions it as "the Charles Lamb and Moxon portrait," and says "it is a striking likeness of the poet, and is an old picture, though there is no proof "that the poet ever sat for it."—(*Johnson's Lives*, *I*, 131, *n*.)

painting, I presume that last mentioned, was exhibited by Mr. Lemon to the Society of Antiquaries on the 17th March, 1853, as reported in Gent. Mag., N.S., xxxix, 526, and was stated to have formerly had the Poet's name in an old handwriting on the back of the canvass, but removed on the relining of the picture a few years ago. To these notices I may add that I have seen a painting in the possession of Mr. Graves, the printseller, from which I imagine the head in Faed's print to have been drawn; and Mr. Way mentions to me a life size portrait, in oils, formerly belonging to his father, at his seat, Stansted Park, Sussex, but which on the sale of the property was handed over to the purchaser in consequence of its forming one of a series of literary portraits partly inlaid in the paneled wainscot. Upwards of ten years ago the same obliging correspondent mentioned to me a painting, attributed to Walker, formerly belonging to Sir Joseph Banks, and now belonging to Archdeacon Bonney, of Lincoln.* Of busts, besides those I have mentioned, one in marble by Scheemaker, for Dr. Mead, and bought at his sale by Mr. Duncombe for £11 11s., is stated in Hollis's Memoirs to have been copied exactly from the plaister bust. A marble bust in the print room of the British Museum bears a strong resemblance to the features of the White portrait. A paragraph in the Athenæum of 10th August, 1850, mentions the purchase by Mr. Labouchere, for 200 guineas, of a marble bust of Milton, made, it is said,

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* An exhibition of miniatures has been held by the Archæological Institute since the reading of the paper; and Mr. Way mentions to me two miniatures there exhibited; one of them, belonging to Mr. Russell, the accountant-general, I imagine from the description to be a copy of the Onslow portrait: the other, exhibited by the Duke of Buccleugh, described as a young portrait, with light brown hair and falling band, and inscribed "John Milton by Cooper," I do not identify, from the description given me, with any portrait I know. A sale catalogue of Messrs. Chinnock and Galsworthy (18th June, 1860) includes an alleged portrait of Milton by James Houseman. To collect the notices of pretended Milton portraits from sale catalogues and similar sources would, however, be an endless and useless task. The notorious old Zincke, of Windmill Street, Lambeth, whose name is so familiar in connection with the Talma Shakespeare, is stated by a correspondent of Notes and Queries (*2nd S.*, *X*, 122) to have "died "about twenty-five years since, and left behind him about twenty portraits of Shakespeare "and Milton &c., all in pledge at the various West End pawnbrokers', and also a catalogue "(written in a small memorandum book) of all the portraits he had manufactured of his "favorite trio, Shakespeare, Milton and Nell Gwinn; but Shakespeare sold the best." Such anecdotes should serve as a caution against credulity in the reception of unauthenticated portraits: but I suspect the Milton manufacture of old Zincke had less tendency to the perpetuation of pseudo-portraits than the practice—of which the Falconer miniature is so flagrant an instance—of appending circumstantial statements of dates and artists' names to portraits which have originally been assigned to Milton on no better authority than conjecture.

from the life by an Italian sculptor during the poet's visit to Italy. Its history is not stated: but it is worthy of note that Mr. Thomas Hollis was so far impressed with the belief that there was somewhere in Florence a marble bust of Milton, as to be induced to make search for it in 1762, but without success. (*See Memoirs of Thomas Hollis, p.* 167, *Warton's Minor Poems*, 333, *ed.* 1791.) A medallion by Wedgwood, a drawing from which is in my possession, completes the list of representations of Milton's features which I have thought it necessary to mention.

TUMULI AT WINWICK.

By John Robson, M.D.

(Read 8th March, 1860.)

In the Ordnance Survey, as first published on the inch scale, about half a mile to the east of Winwick Church, we find a couple of tumuli, one on each side of a bye-lane; but in the later and larger map a single tumulus is marked, through the centre of which the road seems to have been cut. The earlier survey gives the more correct representation of the place, as there have certainly been at least two barrows, one in the field on the east, the other in that on the west side of the lane. The latter, which we shall first describe, is on a farm called "the Highfields," the ground sloping considerably from the north. The tumulus is about six feet above the level of the lane, and the ground to the west is uneven, forming a sort of bank, while the fence on the south has a perpendicular descent of three feet into the next field. The tumulus itself is not very well defined, as it has long been under cultivation, but it may be thirty yards in diameter, and its summit is distinct enough.

On trenching this mound in November, 1859, deposits of burned bones were found at some distance from its centre, on the slopes to the east and south. These bones were in small fragments, apparently in distinct heaps, mixed with minute particles of burnt wood, and one or two fragments of brown, thick, ill-burnt and rude pottery turned up, not however appearing to have any connection with the bone deposits—the only portion of which offering any recognisable character, was the head of a thigh bone of a subject twelve or fourteen years old. About six feet deep in the centre, the red sandstone rock was reached.

There seems reason for believing that this tumulus may have been disturbed, and that the urns in which the bones had been placed having been broken, the bones were again buried while the broken urns were destroyed; at least the two or three pieces found would lead to this conclusion, especially when the later discoveries are taken into consideration.

Some labourers, working in the field on the other side of the lane fifteen years ago, came upon an urn with bones in it, apparently of a similar description.

This tumulus was removed at the beginning of the present year, and the the men in their operations, cutting into some soft black stuff, struck a spade into an urn and broke it into pieces: it seems to have been of large size and has a feathered pattern scored on the outside, (plate VII,) in other respects agreeing with the fragments already described. It contained bones in the same fragmentary state as those found on the west side of the lane, and with them a stone hammer-head and a bronze dart.

The hammer is small, nicely shaped, the face bevelled off for half-an-inch, and the beak with a remarkable cutting edge. It is quite smooth, and very possibly might be polished, and consists of porphyritic clay stone, with large crystals of felspar. It is five inches in length, and rather more in its greatest circumference; the diameter of the face, $\frac{7}{8}$-inch; and the length of the beak (which has the axe form in the same direction as the handle) is $1\frac{3}{8}$-inch; the weight is rather more than nine ounces. (Plate VII.)

The dart is four inches and a quarter long, and one and a half wide at the shoulder. It has the common shape of the spears in early representations, as those on the column of Trajan. The part that has been inserted in the shaft seems very weak; it is about an inch in length, and has a hole at the extremity, through which a rivet has been passed, but it may have originally been longer; at present it weighs six drachms. (Plate VII.)

As these two objects were placed within the urn, it is evident that the head of the dart must have been removed from its shaft; the handle of the hammer must also have been put aside, the head being broken in the centre with a clean fracture right across, and, what is curious, without either portion receiving any injury or splintering.

Two questions naturally arise—what is the age of the deposit? To what people did these relics belong? And in reply to the first we may say that in the present state of our knowledge no satisfactory answer can be given; to the second, more decidedly, to the ancestors of the present inhabitants of South Lancashire. But as both of these propositions have been and will be disputed, we shall have to consider briefly the grounds on which they rest.

With reference to some other stone implements in the Warrington Museum, Mr. Syer Cuming, in an interesting paper given in the Journal of the Archæological Association for Sept., 1859, p. 231, expresses himself thus:—

"These stone relics give a favourable notion of the skill and patience of "the archaic denizens of Lancashire. But with all their skill and patience, "they were yet doomed to fall before the advance of another race,—a race

"surpassing them in art and science and mental culture, whose advent to "our shores was the advent of civilization—civilization which conquered "and subdued the savage tribes of the *stone period*, and upon the ruins of "barbarism erected principalities and kingdoms, whose brazen-equipped "hosts breasted the tide of fresh invaders, and rendered the name of Celt "a proud and lofty epithet."

It must be confessed that the arrangement of ages of stone, bronze and iron does not help us in the present case. True, we may imagine the proud and lofty Celt killing the native barbarian, and getting his little stone hammer, which, as the *spolia opima* of his spear, was buried with his ashes; or we may suppose the barbarian killed the Celt, and the little spear was preserved as the token of his victory. But is it not much more likely that these two articles were really formed at the same period? Would not as much skill and art be required to form the hammer as the javelin? And can we suppose that iron was altogether unknown when they were manufactured?

We must assume, upon this hypothesis, that the Celts so completely rooted out the barbarians, that not a trace of them remains, except these stone implements—while the Saxons so exterminated the Celts, as to leave nothing whatever that has any characteristic mark behind them—as bronze remains undoubtedly belong in abundance to the Romans, and we have yet to learn what difference there is between the Roman and Celtic bronzes.

If we do not wish to be misled by theories, however ingenious, it is highly expedient to believe that the population of any given district is descended from the very earliest inhabitants which history records, and of which any remains exist. Hypothetical national destructions are very shadowy matters indeed. Investigations, where there is nothing to investigate, must lead to illusions—visions, more or less dreary, in the dream-land of imaginative antiquarianism. The finish of an implement like this hammer-head, its shape or symmetry, much less the material, can in no case lead us to the period when it was formed, or the person who formed it. The spear-head belongs to all ages and all nations; it is the simplest and commonest form, and the metal of which it is made is the principal material of which such articles were formed for centuries. When metals were scarce, and we have neither iron nor copper in South Lancashire, stone would naturally be made use of for such implements as hammer-heads, but even where brass and iron were well known, it would still in some cases be economical to use what was so ready at hand. In

our museum there is an instrument, like a tailor's goose of very large size, made of stone, with the initials of the owner and the date 1607, used in fulling cloth; and a stone bat, which has been put down as a war-club of the primeval savage, seems far more likely to have been a mallet for beating hemp, or some such purpose, and may have been used as lately as the tailor's goose.

The great drawback of these hypothetical periods is, that while they are of little practical use, except for the very secondary one of arranging a museum upon an easily understood but misleading principle, they take away the investigator from the real matter and mode of the inquiry, and, like all such errors, are a hindrance to truth. In some graves are coins which carry a date with them, and in others Roman remains which belong to the first four centuries of our era. But in tumuli, such as those at Winwick, there is nothing to show whether it was raised six centuries before or six centuries after that period; and we want more evidence than the stone hammer to show that the people to whom it belonged were savages, to whom metals were unknown; and more than the bronze spear head to prove that it was formed by the Celts, who are assumed to have been equally ignorant of the use of iron—while these last are fancied to have been annihilated by the Saxons who employed that metal. There can in fact be no reason why the original barbarian could not have worked copper or iron in his native land, just as the Celt found his copper in his country, wherever that might be, or the iron man his iron.

In conclusion, I would submit, with great deference, another system of classification for antiquities found in England. It would include three great classes:—First, all those remains which offer no marks of Roman art or influence. Second, those where the foreign taste in the design or manipulation can be detected. Third, pure Roman, Greek, Oriental or other easily distinguished articles, which will be neither numerous nor important.

It would be especially requisite to form provisional geographical subdivisions—at first general and extensive, as South and North of the Thames—or the Humber—Cambrian, &c., &c. These would become more definite with increasing knowledge.

And, lastly, a Chronological division might be made—of Primeval, before Julius Cæsar; Romanic, to the fifth century; and Mediæval, after that date; not, however, without good evidence that the period to which any object was assigned, rested upon a sufficient basis.

ON POISONS.

By F. Crace Calvert, Ph.Dr., F.R.S., &c.

(Read 10th May, 1860.)

To have treated completely the subject to which I am about to call your attention would have required more literary knowledge than I possess, together with very long researches, which my present occupations do not leave me the opportunity of making.

Instead of proceeding in the usual way,—namely, by giving an historical account, and afterwards treating on our present scientific knowledge, of poisons,—I have thought that the subject would be more agreeably and profitably brought before you by taking each division of poisons separately, and treating the historical facts in connexion with them as compared with our present knowledge of the same.

There are three classes of poisons:

First, the contagious or infectious, as cholera or plague. Into the consideration of this I cannot enter, as it is too extensive a subject, and belongs rather to medical science than to chemistry.

The second class consists of poisons which become active only when brought into contact with the blood of an animal, as in the case of the bite of a serpent, or that of a mad dog.

The third class comprises those poisons which are administered or taken by man, and which produce death by being absorbed by the mucous membranes of the stomach and intestines, and conveyed into the whole system. This will form the principal topic of this evening's paper; but before proceeding to its consideration, I wish to make the following remarks on the second class of poisons.

From the most remote periods, men have been in the habit of increasing the deadly effect of their defensive weapons by coating them with various

virulent poisons; and though it is impossible to know the nature of the poisons which were used for that purpose by the barbarians of Northern Europe, still chemistry has of late years thrown some light upon those used at the present day by the Indians on the shores of the Mississippi. A few years since, Messrs. Pelouze, Reynoso and Bernard investigated with great care the chemical composition of the *curare*, and found that it was not composed of vegetable juices, but was of animal origin. This they proved by giving small quantities of it to animals, when it was found that, like all other animal poison with which we are acquainted, it produced no deadly action, whilst if brought, in the smallest quantity, into contact with the blood, death ensued in a few minutes. They also found that the reason why the curare does not act as a poison when taken internally, is that the mucous membrane of the stomach and intestines will not absorb, and thus convey to the blood, the curarine, or active principle of the curare. They also found that the poison from the toad and salamander possessed the same properties. M. Reynoso also made a most interesting observation; that if a drop of bromine was applied immediately to the puncture made by the poisoned weapon, the life of the animal was saved. Let us hope that as science progresses, and chemistry becomes more closely allied with medicine, equally efficacious remedies may be found for the bite of a serpent or that of a mad dog. To show what extraordinary power some of these poisons possess, Sir Robert Schomburgk states that the puncture of a needle, coated with the concentrated poison called *urari*, might be sufficient to destroy life. Professor Albert Kölliker found, during his researches on the *upas antiar* poison, that the rapid death of animals appeared to be due to the contraction of the valves of the heart. Up to the present time, but little light has been thrown upon the nature of the poisonous principle contained in putrefied meat. Even the researches of Professor Julius Schlossberger, on the unsound sausages of Germany, attribute their poisonous action to an alkaloid, which, however, he did not succeed in isolating. Allow me to state, before leaving this part of my paper, that I have been for two years past engaged in examining the phenomena of putrefaction, and that I hope in time to be able to discover the nature of those animal poisons which, when brought into contact with the blood, cause its rapid decomposition.

I now proceed to the third class of poisons, which, for convenience, will be divided into two principal sections—the vegetable and the mineral.

The use of vegetable poisons dates from the most remote periods, for we find them alluded to in the heathen mythology. These mysterious and terrific weapons were, in most of the ancient nations, in the hands of the priests and kings, who showed themselves jealous of the secret of their use, which gave them the power of inspiring terror, by the infliction of the most rapid deaths. The causes of these deaths not being traced, the men condemned and punished by earthly judgment appeared to be struck by the hand of God.

The Persians, who succeeded to the Medes, the descendants of the enchantress Medea, used to teach their children the art of distinguishing plants, that they might use or reject them according to their useful or injurious properties.

The Greeks employed poisons, as is established by the well-known deaths of Socrates and others; and it was with them that the mineral poisons first made their appearance by the use of the sulphurets of arsenic, which they named *aurypimentum*, and the subject of poisons was deeply studied by them.

The Romans, especially the successors of Augustus, made great use of poisons. The Danes were acquainted with the use of poisons, as is shown by their practice of dipping their arrows in the juice of the white and black *hellebore* and that of the *aconitum*.

After the invasion of the Roman Empire by the barbarians, the art of using poisons seems to have been lost or little practised. The same remark applies generally to the middle ages. The disorders into which Europe had fallen at that period, did not require the use of mysterious executions—the dagger being at once the instrument of justice, of vengeance and of crime. In the succeeding period we see the re-appearance of the arts, of sciences, of occult studies, and with them of poisons, which again became a frequent instrument in the hands of rulers. The seventeenth and eighteenth centuries present numerous and terrific instances, showing the dreadful deeds which may result from the abuse of knowledge. But be it said to the honour of present times, and as a homage rendered to civilization, that we have but comparatively few crimes, and that, with few exceptions, the hands which employ this cowardly and disgraceful weapon are generally found among the lowest orders of society. Before commencing the consideration of vegetable poisons, it is necessary

to state that, notwithstanding the progress of science, the knowledge of the ancients was in this respect more perfect than our own. It is easy to explain how these poisons were discovered, for nearly the whole of the remedies or medicines employed by the ancients were of the vegetable kingdom. Therefore, by the constant use of plants, their general properties were discovered, and the knowledge of beneficial substances and those which were not so became familiar to them. The plants which yield beneficial substances frequently contain others of a poisonous nature. I need scarcely mention the root from which we obtain tapioca, as containing prussic acid together with starch. I could also mention the herb *hellebore*, which was used by the ancients as a remedy against folly; and it will be readily seen that in this case the step from the use to the abuse was one but too easily surmounted by a perverted mind.

I hope to be able to prove that the poisons used by the ancients are known in these days, and that if they are not employed, it is merely because the mineral poisons have been brought more prominently under the notice of the public.

The metamorphoses and enchantments of Circe can be in a great measure explained by considering the hallucinations produced by the use of belladonna, henbane, and what was called by the ancients mandrake, which, when taken in too small quantities to produce death, affect the mind, and during the state which ensues, the sufferer not unfrequently imagines himself transformed into an animal, &c.

These general effects can be better explained by medical science than by chemistry.

At a more recent date, we find that Hannibal employed mandrake in subduing the revolted Africans. Having mixed it with the wine in his camp, he retreated, leaving it behind him, and they, as he expected, drank it, and soon experienced its dreadful effects.

Opium.—The extensive employment of this substance in southern climates is due to the delightful dreams which it gives to those who use it. But let us pity those weak men, the indolence of whose minds has been so far indulged as to render such means necessary to enable them to revel in their paltry dreams, when they might have been invigorated by following that golden path of industry and learning which is the glory of this country.

I am sorry that the mind of man has such a tendency to imitation, that even in this country, England, there are persons who indulge in this slow and mortal poison. For it is well known that whenever our nerves are over-excited, the animal force which this over-excitement has brought about will be needed at a future time. Therefore, the more this poison is taken, the more it is required, and at length the time arrives when it has worn out that splendid creation of God—the intellect of man.

We could readily account for the employment of opium were it to destroy the animal machine at the same time as the mind, but it is not so in some cases; for we find that, owing to the nervous system having its origin in the brain, and the action of opium being principally on that organ, the mind is frequently destroyed many years before the body

Opium is a poison, even in small doses, for weak constitutions, or those which are not accustomed to its use: it has even occurred that persons have died from its external application. The best thing to give in such cases is an emetic, or an infusion of gall nuts, or of oak leaves, or coffee. All the poisons similar to morphia or opium, to strychnine or brucine from nux vomica; the veratrine from the delphinium, or the colchine from the colchicum, form insoluble compounds with the tannin of the above substances.

Opium, which contains many active principles, such as morphia, codeine, narcotine, &c., is one of the most important poisons among this class of substances, and is one of the most easy to discover.

The means of detecting opium are, to boil the poisoned substance with vinegar, add an alkali, collect the precipitate, dissolve it in acid, again precipitate it, and, after having dried it, leave it in contact with chloroform, which dissolves several of the active principles of opium, and leaves them as a residue when driven off itself by heat. This residue gives with nitric acid a red colour, which is not changed by chloride of tin. When dissolved in water, the liquor will give a red or blue colour with the perchloride of iron, and lastly a blue colour with iodic acid and starch.

Let us observe that although these characteristic reactions take place, it is sometimes very difficult to detect the presence of opium in a poisoning case. As an instance, we may mention that of Casting, a French doctor, who killed his friend with acetate of morphia; and it was with considerable

hesitation that one of the first chemists of that time ventured to swear that he had found opium.

Nux vomica contains two of the most violent poisons, namely, strychnine and brucine. It has been believed that the poisoned arrows used by the natives of Borneo and Madagascar are dipped in a juice called by them "upas fiente," which is procured from plants containing strychnine and brucine, although the late researches of Professor Albert Kölliker seem to throw some doubt upon it. An animal struck by one of these arrows falls, struggles and dies in a few minutes. The best, but almost hopeless, antidote that can be given in a case of poisoning by strychnine, is an infusion of gall nuts.

The means of detecting these poisons are, to obtain a solution, as in the case of morphia. A portion of the liquor will give a white precipitate with a current of chlorine, and the remaining portion gives a red colour with nitric acid, which becomes purple by chloride of tin. It also yields a beautiful purple colour when moistened with sulphuric acid, and then mixed with a little bichromate of potash or peroxide of lead. This test is so delicate, that one ten-thousandth part of a grain can be detected. Another characteristic test is a brownish yellow precipitate that it gives with an iodine solution; this precipitate is soluble in a solution of potash, which, nevertheless, allows it to re-form under the form of a white amorphous powder.

There are several other poisons belonging to this division, but it would render the paper too long and technical to touch upon them.

Prussic acid.—This dangerous poison has been known from the most ancient times. The Egyptians were acquainted with it, as has been proved by the finding of a paper, which must have been written at least 2000 years before the Christian era, on which were the words, "Do not pronounce Iao, "under the penalty of the peach." It is well known that the leaves of the peach tree contain a great quantity of this poison. It is by no means extraordinary that the Egyptians should have been acquainted with this poison, which is also given off in great quantities by the flower of the bitter almond, from which fruit the oil of that name is prepared.

It was most likely its instantaneous action and difficulty of detection

that led the Ethiopian priests to make use of it in the execution of persons, even kings, whom they had condemned to death.

These are not the only instances in which poisons have been employed by the hand of justice.

The bitter waters administered by the Jews to adulterous women, most probably contained prussic acid. Even in our days, this mode of punishment is employed, as we find in Madagascar, where, in the space of 12 years, more than 150,000 persons, out of three millions of inhabitants which the island contains, were executed under the dreadful sentence pronounced against them by the law of the Tangben (Tanguinea Venenifera).

Prussic acid is so violent a poison, that a few drops will kill an animal, and even its vapours will produce death. From its being given in medicine, and produced in some of the operations of industry, cases of poisoning may occur in which time may be left to employ an antidote. The first antidote is to make the patient inspire chlorine with caution. An antidote has also been given, which consists of a mixture of protoxide and peroxide of iron with carbonate of soda. If no other means were at hand, Goulard water might be given, with great caution, in small doses.

Bodies in which this poison has been the cause of death, present the curious fact that the arterial blood is instantly changed into venous.

The body retains for a long period the characteristic smell of prussic acid. The best means of discovering it are to wash the inside of the body with water; distil a portion of the liquor, and re-distil that again. The liquor thus obtained will give a white precipitate with nitrate of silver, soluble in nitric acid and ammonia, which will give off the smell of prussic acid when treated with chlor-hydric acid.

The most delicate test for this poison consists in evaporating on a watch-glass some of the substance supposed to contain it with sulphuret of ammonia. A residue will be left, which will yield, with per-chloride of iron, a most splendid red colour. After adding to the liquor a little potash, then a salt of iron, Prussian blue will be produced on the addition of chlor-hydric acid.

Allow me, ladies and gentlemen, to state that the oil of bitter almonds should be used with the greatest caution, for even in small doses it may

produce the most serious results, owing to the quantity of prussic acid which it contains. I may also state that nitric ether contains prussic acid, and therefore ought to be used with care; and in all cases where it is possible, it should be substituted by sulphuric ether.

Before quitting the subject of organic poisons, I think it right to give some idea of the general processes adopted for their detection in cases where their presence is suspected.

A portion of the fluid is distilled, and if prussic acid or oil of bitter almonds be present, it will be found in the distillate. If these are not found there, a fixed alkali is added to the fluid which remains in the retort, and distillation is continued. When nicotine, the poison of tobacco, coneine the active principle of hemlock, secaline, the active principle of the ergot of rye, or hyoscyamine, the active principle of henbane, is present, it will be found in the distillate. If the poison be a non-volatile substance, we then proceed by the process described in the instance of opium, and we employ either chloroform, ether or fusel oil, according to the active principle of the poison which we suspect, in order to separate it from the matters with which it may be mixed in the contents of the stomach. Dr. Hofmann and Mr. Graham, master of the mint, employed with success a few years ago, animal charcoal as a means of separating the strychnine from beer which might contain it. Mr. Herapath of Bristol has employed the microscope with great advantage to detect this class of poisons. So able a toxicologist is he, that he was able to detect aconite, the active principle of monkshood, in a case of poisoning which occurred through a person eating that root in mistake for horse-radish. I may take this opportunity to state that this poison is so violent that Mr. Herapath states that the quantity which proved fatal in the above case did not exceed the twentieth part of a grain. He also gives the following simple means of distinguishing between the roots of the aconite and those of horse-radish, which I think ought to be made public as it may prevent many lamentable accidents. The scrapings of aconite roots rapidly acquire a very perceptible pinkish tinge, more or less deep, on exposure to the air, whereas those of the horse-radish undergo no change under such circumstances.

Silver, Lead, Copper, Tin, Zinc, and their Salts.

There is no doubt that these poisons were employed by the ancients, but

they were seldom used by the renowned poisoners, because these salts have a very strong metallic taste, which would have been the cause of revealing their deeds.

A useful discovery has been made of late years relating to the localization of poisons; it is, that they have a tendency to fix themselves in some organ, and principally in the liver, instead of distributing themselves over the whole system, and settling chiefly in the flesh and blood as was formerly believed.

Therefore, instead of taking the whole body for examination it is only necessary to take an organ, thus rendering the operation much more easy, and increasing the probability of detection.

The following is the order in which the organs are to be taken, for arsenic, antimony, silver and lead :—

1st, The Liver,
2nd, The Spleen,
3rd, The Kidneys,
4th, The Intestines,
5th, The Lungs.

For copper the order is changed :—

1st, The Liver,
2nd, The Intestines,
3rd, The Spleen.

And lead sometimes fixes itself abundantly in the lungs. It is here necessary to remark that the belief that lead and copper exist in the human system is fallacious. Large quantities of these metals have been administered to animals, increasing the dose each day. As much as two ounces of blue copperas have been given in six months, after which, the animal being fed for seven days on normal food, and then killed, no traces of copper could be discovered. Therefore, if the organization entirely rejects such enormous quantities of copper, it is impossible that it can exist naturally in the system. It has also been found that copper left the system by the intestines and the saliva, and not by the kidneys, as is the

case with arsenic and antimony. This is the order in which the metallic substances are rejected by that organ:—

Antimony,
Gold,
Arsenic,
Silver,
Lead,
Copper.

To discover these substances, namely:—

Silver,
Lead,
Copper,
Tin and
Zinc,

the organic matter is destroyed by one third of its weight of oil of vitriol; the whole is then evaporated to dryness, and calcined at a low temperature, a small quantity of sulphuric acid is added for copper and zinc, nitric acid for silver and lead, aqua-regia for tin, boiled and again evaporated nearly to dryness; water is then added, and the filtered liquors give the characteristic reactions of silver, lead, copper &c.

Mercury and its Salts.

Bi-chloride of mercury or corrosive sublimate has been employed in connection with arsenic by most poisoners. For example, in 1613 it was given by the Earl and Countess of Somerset to Sir Thomas Overbury. The best antidote for this active poison is the white of egg, or the proto-sulphuret of iron, and the easiest method of detecting it is to destroy the organic matter in which it is presumed to exist with oil of vitriol, and after the whole has been heated for two hours to add gradually chloride of lime. When the acid is entirely removed the whole is treated with strong alcohol, which dissolves the corrosive sublimate. After adding water the solution is ready for the delicate test of Simpson's galvanic pile.

Antimony and its Salts.

To discover this poison the matter is treated with oil of vitriol. When the whole is liquid add nitrate of soda and evaporate to dryness. Boil the

residue with tartaric acid, and it is then ready for Marsh's apparatus. The spots obtained with this apparatus should dissolve slowly in nitric acid, and when the solution is evaporated to dryness the residue left should be entirely insoluble in water, being antimonious acid. To render it soluble it must be treated with aqua-regia, when the liquor gives a white precipitate with water, and an orange yellow precipitate with sulphuretted hydrogen insoluble in ammonia.

In fact, when there is either arsenic or antimony alone no difficulty presents itself in the detection, but there are difficulties to be overcome when mixed spots of antimony and arsenic have to be dealt with, which, however, may be surmounted if the precaution is taken of having a metallic ring in the tube of Marsh's apparatus; then by applying Fresenius's test it is easy to decide the question as to whether arsenic or antimony be present.

Arsenic and its Compounds.

L' aqua Tofona was the name given to a poison used by a Neapolitan woman named Tofona, who was the inventor of it, and who employed it to such an extent that, according to her own statement, she had destroyed 600 persons by its means. It was probably arsenic combined with an alkali, and forming a soluble salt.

In 1672 there occurred in France several cases of poisoning, perpetrated by the Marquise de Brinvilliers. We find in the accounts of the examinations of the chemists and druggists at her trial, that arsenic and corrosive sublimate were employed, but their statements are mixed up with hesitation and ignorance.

A few years later new and similar crimes appeared, which were perpetrated by a woman named La Voisin, who under the name of "powder of "succession" used to sell the corrosive sublimate and the arsenic of Brinvilliers, and the use of this powder became so common that members of several of the noble families of the court of Louis XIV became implicated in the act of accusation which followed. But such was the ignorance of those appointed to investigate this case that this woman was condemned more under the plea of sorcery than as a poisoner.

We may here observe, that notwithstanding the progress of toxicology

there has been, even in our day, considerable difficulty in detecting arsenic when given in repeated small doses. It is scarcely necessary to mention the case of Madame Laffarge.

An over strong dose seldom proves fatal, owing to the violent vomiting which ensues.

The fact which makes the discovery of this poison rather difficult in some cases is, that the small quantity required to produce death can in great measure be removed from the system by several natural causes. Another fact which only a few years ago rendered its detection in some cases difficult was, that its property of localising itself in the liver was not known.

To detect arsenic it is necessary to destroy the flesh entirely, and this is easily effected by boiling it with oil of vitriol, and drying the whole at a gentle heat. It is then heated with a few drops of nitric acid, which effects the complete destruction of any remaining traces of organic matter, and also transforms the arsenious acid into arsenic acid, which is very soluble in water, and may at once be put into Marsh's apparatus.

When the well known spots obtained by this apparatus are procured they are heated with a small quantity of strong nitric acid. After having driven away the excess of acid the residue is soluble in water. The solution is divided into four portions: the first gives a red precipitate with neutral nitrate of silver; the second gives a light blue precipitate with ammonio-nitrate of copper; the third produces with sulphuretted hydrogen a yellow precipitate soluble in ammonia; and the fourth evaporated to dryness, when mixed with black flux and heated, gives a ring of metallic arsenic.

Trials may also be made with a ring obtained in the tube by heating and slanting it slightly, when the arsenic is transformed into crystals of arsenious acid, and if unsatisfied with these tests Fresenius's test may be applied, which consists in passing a current of sulphuretted hydrogen over the metallic ring, which will give distinct characters with arsenic or antimony. And this process may be still further carried-out by passing a current of hydrochloric acid through the tube, which does not attack the sulphuret of arsenic, but transforms the sulphuret of antimony into chloride, and drives it away.

In the case of a liquor containing arsenic Reinsch's test may be employed, which consists in plunging into the suspected fluid a clean copper wire gauze, adding a few drops of chlorhydric acid and heating the whole, when arsenic, if present, will be deposited on the copper gauze.

The best antidote for arsenic is the hydrate of per-oxide of Iron, but in consequence of its not being readily met with other means have been proposed. Purified animal charcoal has been recommended, but its action is very doubtful. Another antidote has proved very efficacious and is of great value, as it can be found in any chemist and druggist's shop, namely, calcined magnesia, but to be really active it ought not to have been too highly calcined. Before parting with this interesting subject, I must state a fact of the greatest importance, which has not been sufficiently brought under general notice; it is, that the human frame does not contain one particle of arsenic nor or any of its compounds. The erroneous opinion that arsenic existed naturally in the body originated with one of the most eminent of toxicologists, who believed that he had found arsenic in the bones, whereas it only existed in his re-agents. This was proved by a series of experiments undertaken by a committee of the first chemists of the day. I shall, therefore, take the liberty of repeating that this error should be removed, for it has been the means by which juries have been frightened and acquittal obtained.

During the last few years public attention has been often called to the injury which persons have sustained by inhabiting rooms the paper of which was covered with green patterns of arsenite of copper. Several hypotheses were formed on the subject, but it has been satisfactorily proved that the injurious results did not arise from any volatilization of the arsenic, but simply from the arsenite of copper being rubbed off, and this, floating in the atmosphere, produced dangerous effects upon health. This being established, the evil can be easily avoided by using no green papers except flock or others of good quality and well glazed. Let us hope that the knowledge of this fact will prevent builders and others who have control over the dwellings of the poor from using such dangerous papers.

The extraordinary increase in the use of arsenious acid in manufactures, especially in calico printing, is so rapid and continuous as to call for serious consideration, and will perhaps even shortly require legislative interference. For instance, I have found lately, that several of the streams of Lancashire

are polluted for miles by arsenical compounds, floating down them chiefly from printworks. It is therefore highly desirable that printers should adopt means to prevent their refuse, containing such compounds, from finding its way into public streams where it may be productive of incalculable injury to great numbers of persons living on the banks.

So thoughtless are some people as to the nature of the materials they employ, that arsenic is not only used in great manufactures, but is becoming more and more commonly introduced into substances of daily use in our private dwellings. I need hardly mention that most of the papers sold for killing flies are simply saturated with arsenious acid, and serious accidents have arisen from this one source alone. It is perhaps unnecessary for me to remind you how commonly arsenite of copper is employed in the colouring of wax tapers, sweetmeats and envelopes.

Whilst on the subject of poisonous matters introduced into our private houses, allow me also to draw your attention to the practice of supplying the dwellings of great cities with very soft water through leaden pipes. I am satisfied from my own experiments that water becomes contaminated with lead if allowed to sojourn in contact with leaden pipes for 10 or 12 hours, and it is probable that many persons suffer from the influence of this small quantity of lead in the water which forms their daily beverage. It appears strange when we call to mind the numerous instances which have occurred of lead poisoning, that our corporations should not only persist in refusing to make use of pipes properly lined with tin, but should even purchase pipes made of the lowest quality of lead that can be found in the market. Although several chemists have devoted a great deal of time and labour to the investigation of the action of water upon lead, still there has yet been no satisfactory explanation of the fact, that different waters of the same degree of hardness or softness will often act upon lead very differently. The best paper which has been published on the subject is by Mr. Medlock, who has observed that water containing only a slight trace of nitrates becomes rapidly charged with lead, and also that water containing a considerable quantity of organic matters capable of giving off ammonia, which is easily convertible into nitric acid, will also act powerfully upon that metal. Although it is comparatively easy for the chemist to discover the presence of lead in water, by the instrumentality of sulphuretted hydrogen and bichromate of potash, it is to be regretted that

no simple means are known by which the public might readily ascertain for themselves the purity in this respect of the water they drink.

Phosphorus is so violent a poison that a case has recently occurred of death being caused by the administration of the quantity scraped from seven or eight lucifer matches; and society has had within a few years past to deplore the deaths of many children arising from their sucking lucifer matches carelessly left within their reach; it is therefore with great pleasure that I have lately heard of the manufacture of matches into the composition of which no phosphorus enters.

Mr. Mitscherlich has published a very simple process for discovering the most minute trace of phosphorus. It consists in introducing into a flask connected with a U tube the fluid suspected of containing phosphorus, together with a small quantity of vitriol. On applying a gentle heat to this mixture a beautiful phosphorescent light is perceived in the lower part of the U tube, especially if that part of it is surrounded by a frigorific mixture.

Before concluding I wish to state that I am of opinion some legislative restrictions should be placed upon the free sale of poisons. As to the nature of those restrictions I cannot do better than lay before you the conclusions to which the Manchester and Salford Sanitary Association came some two years ago.

Lastly, although I have not shrunk from shewing you the deficiencies of science, we must be struck with the progress which chemistry has recently made. Only fifty years ago there were but few, if any, poisons which could be discovered with any degree of nicety, and when we reflect that now most poisons, organic as well as mineral, can be detected in the small doses of from one-tenth, to one-ten-thousandth of a grain, we must feel astonished at the progress of Toxicology. But, for the tests to be carried out even with a much less degree of exactitude, they must be handled by persons of great practice and experience, who devote their whole attention to this branch of chemical science. Complicated cases of poisoning may happen, in which a thorough and minute acquaintance with the progress of chemistry is indispensable. Again, it has been discovered that saliva contains a principle which gives a red colour with the salts of per-oxide of iron, one of the characteristic reactions of opium;

therefore how easy for a person to believe he had discovered opium where none existed. For these reasons I am of opinion that Government should specially appoint a sufficient staff of competent toxicologists, whose sole occupation should be to examine poisoning cases, and that a certain number should be named to act in concert in each instance.

By the adoption of this course unjust blame to science would be avoided: neither should we be under the necessity of grieving for the consequences which arise, when the investigation of such cases is entrusted to persons who are not thoroughly acquainted with the subject; nor of doubting the justice of a sentence by which the innocent were acquitted or the guilty condemned.

NOTES ON CLAY PIPES: THEIR USES AND FORMS, MAKERS AND DATES.

By Mr. H. Ecroyd Smith.

(Read 8th March, 1860.)

A short paper upon this subject, by the late Mr. A. J. Lamb, appeared in the third vol. of this Society's Proceedings.* It contains some useful memoranda, some additions to which I propose laying before you on this occasion.

The custom of smoking is of undoubted antiquity in America, if not in other quarters of the globe: an ancient Mexican legend asserts tobacco to have been smoked at the creation of man; and, allowing a wide margin for the tradition, it yet establishes the very early use of the narcotic on the American continent;† the *infundibulum* of the Romans, if not of analogous *shape* to ours, was probably used in the same fashion; and in the "Northern "Antiquities" of Bartholinus, a representation is given of an old stone effigy of Odin, from whose mouth projects a pipe, said to be precisely similar to that reported as protruding from the skull of an Irish Celt, in a bog at Bannockstown, county Kildare.‡

The exact date is uncertain, but from Humboldt and other authors we learn that tobacco was directly introduced into this country from the Caribbee Islands, where the *pipe*, and *not the weed*, bore the name, *tabac*, subsequently corrupted into tobacco. The first Englishman known to have smoked it, is Thomas Lane, Esq., Sir Walter Raleigh's first Governor of Virginia; but the earliest reference to smoking in England or her colonies occurs in a communication from a Mr. Hariot, also of Raleigh's colony, between the years 1559 and 1586. So early as 1597, however, the custom was so general, that we find Bishop Hall, in a satire on the "decline "of ancient hospitality," complaining of its formidable encroachment.

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* Page 20.

† Notes and Queries, 2 s., vol. ii, p. 124.

‡ Dublin Penny Journal, vol. iv, p. 30.

A very interesting work, in connection with our subject, has recently appeared from the pen of Mr. F. W. Fairholt.* In his chapter on pipes he has barely done justice to some of his antiquarian brethren, who are derided for entertaining the belief that the smoke of *several* substances, prior to the introduction of tobacco, was inhaled through a *pipe*. This opinion is denounced as puerile, conceited and groundless, our author placing it in the same category with the absurd notion of some well-meaning but shallow antiquaries of the last century, who, finding the articles in question in, even to us unaccountably, close connection with early remains, Celtic, Roman or Saxon, too hastily concluded them to be the productions of those eras. Not possessing, at present, a sufficient amount of evidence for absolutely disproving our author's dictum, I content myself with supplying reasons for not accepting it.

Subscribing to the statement of Mr. Crofton Croker and others, that the smallest bowled pipes—called in Ireland "Fairy" or "Danes' Pipes," and in Scotland "Elfin" or "Celtic"—are the earliest extant in our country, I yet demur to their minute size being a *necessary consequence* of the scarcity and dearness of tobacco. That the pipes previously in use suited well with this dearness, and were enlarged in proportion as the weed became cheap, is quite as tenable a hypothesis. Mr. Fairholt concedes that from a remote period several herbs were medicinally consumed in smoke; and it is a mere assumption to assert that our forefathers never smoked, as a luxury, or that they never, even medicinally, imbibed the vapour in the presumed modern fashion. The substances consumed included coltsfoot, sword grass, dried cows' dung and realgar or realgal, a poisonous earth, procured in the East Indies, and most probably introduced by the Dutch. Coltsfoot is strongly recommended by Lord Bacon.† That most, if not all of these articles have been more recently used for adulterating tobacco itself is surely no argument against their consumption, "pure "and simple," through pipes! At the present day, a white moss is gathered, dried and extensively smoked by the poorer Highland cotters, whilst in England *eyebright*, *buck bean*, *dock*, *camomile* and other herbs are similarly consumed in rural districts. Immediately after the introduction of tobacco, and before the close of the 16th century, clay pipes were already in

* Tobacco: its History and Associations. London, Chapman and Hall, 1859.

† *Vide* Gentlemen's Magazine, Oct. 1858.

general use, as Mr. Fairholt's work abundantly testifies; yet we are gravely informed that the first English pipes were made of *silver!* We rather incline to the belief that clay pipes were already in existence among the common people, at least in some districts, although their use might not have obtained in others or even in London. Doubtless they were of native manufacture, whencesoever the original design may have sprung.

Hitherto we have mainly argued upon probabilities; facts, however, are not wanting. Reference to the mythical Milesian of Bannockstown bog is no longer necessary to our purpose: we make no account of the casual proximity of such articles to Roman or other early remains, but invite the sceptic to visit the present excavations for new docks at Rotherhithe, on the banks of the Thames. Here, at a depth varying from 2 to 20 feet below the surface of the ground, may be seen numerous pipes deposited in the ancient silt. During the progress of the works it became necessary to remove an old house, bearing the date of its erection in 1575; yet some 10 or 12 feet below its very foundation, the silt—termed ballast by the navvies, but unquestionably the deposit of the river—was found to contain the small older forms of pipe heads. Here we must allow the earlier manufacture, or admit the extravagant assumption that the original stratum upon which the house was built had been washed away, and replaced by a comparatively recent bed of silt, the edifice above remaining meanwhile intact! For the particulars of this remarkable find I am indebted to Mr. Edward Tindall, of Bridlington, Yorkshire, whose ancestors for many generations were pipe potters, and who, having been a collector of the objects themselves for the past twenty years, is a competent authority on these points.

Mr. Fairholt instances the pipes reported by Mr. Lamb as found at Hoylake, but is here singularly unfortunate. The writer happens to possess, he has good reason to believe, all the old pipes which have turned up in this particular district within the last three years or more, and finds that the smallest and oldest examples do *not* occur about the site of the camp of William III's troops, but in or around the village of Great Meols, certainly the most ancient hamlet in the whole country side. William's soldiery used quite another form of pipe, of double the capacity. The mistake has perhaps originated through the specimens illustrating Mr. Lamb's paper having been procured in adjacent localities,

and, in common with too many of the Great Meols antiquities, erroneously labelled "Hoylake," a name of comparatively recent origin. Examples are here exhibited from East Yorkshire, noted two centuries ago for its pipe manufacture, and from both shores of the Mersey. Near Warrington, upon sites occupied during the civil war by Cavaliers or Parliamentarians, these articles are of frequent occurrence, as I am informed by Dr. Kendrick, to whom I am indebted for several specimens. In shape, the pipes appear since the 16th century to have always varied much, and consequently it is somewhat difficult to apportion all to their respective dates. The present arrangement by centuries will, however, prove tolerably correct, and illustrate the main types, from the earliest known down to those in use at the close of the last century, since which the variations, both at home and abroad, have become almost interminable. Some of the older forms are found useful during country sport, and several noblemen are known to use them in the field. A German periodical of Dec., 1813, records a curious find. "In digging a new sluice-"way at the upper end of the Fairwater at Dantzic, an ancient ship was "discovered, nearly 20 feet under the surface of the ground, laden with "blocks of stone prepared for building, some of which were highly polished. "Many human bones were found in the hold of this vessel, both fore and "aft, and a *box of tobacco-pipes, all whole*, with the heads about the size of "a thimble, and stalks from 4 to 6 inches in length."*

After the decay of their Delft fabrics in the 17th century, the manufacture of tobacco pipes introduced from England, as well as imitations of fine English wares, became a great source of employment to Dutch and German workmen. Count Marcolini in 1784 founded at Hubertsberg, in Saxony, a manufactory which produced articles nearly equal to the English; others were established at Gotha.† The British consul at Ostend reports, in 1765, a singular instance of Dutch strategy. A manufactory of pipes had been set up in Flanders, which the Dutch wished to ruin. This they might have effected by a very large importation of the article, but the high duty rendering this expedient too expensive, they loaded a large ship with pipes, and purposely wrecked her near Ostend. In accordance with port regulations, the cargo was landed and sold there at such a low price that

* Dublin Penny Journal, vol. iv, p. 20.

† Marryat's History of Pottery, 122.

the new manufactory at once sank under the blow * A Mr. Hollis, passing through the Netherlands in 1748, reports extensive pipe-works at Gouda, and he was informed by the master that the working tools still retained their original English names.†

Under the designation of Tigelwyrtena Cræft, the potter's art was practised by our Saxon forefathers. The incorporation of the craft took place 5th Oct., 1619. A charter of incorporation was petitioned for to Queen Anne, but the petition was not acceded to.‡ Of the early English manufacturers of *pipes*, however, we possess only a few scanty notices, as in lists of trades. Enquiries have enabled the writer to supply a few unrecorded particulars, which some gentlemen connected with this society may have it in their power to extend. Mr. Mayer states that a person named Morgan is believed to have been one of the earliest of these potters in Staffordshire, and that his descendants are, or were very recently, engaged in the same occupation. In his Natural History of Staffordshire, written in 1686, Dr. Plot speaks of the manufacture of tobacco pipes at Newcastle-under-Lyne; the necessary clay, with other kinds used in the neighbourhood, being obtained close to the town of Burslem. In Yorkshire, the production was carried on chiefly at Hull and Beverley, in the East Riding, and some of the pipes found are known to be of the 16th century. The apprentices of these manufacturers introduced the art into other districts, one commencing at Loughborough, cir. 1600, and another, Thomas Barrick or Barwick, settled in Edinburgh about the same period—his pipes being known by his initials stamped on the breast of the bowl. Subsequently, a manufactory was established at Leeds, a clay being discovered in Wortley hundred, capable of retaining its whiteness after burning.§ The "Bideford clay" appears to have early been in general demand. Lysons|| informs us it was procured previously to 1800 at Weare Gifford and in the parishes of Petersmerland and Petrockstow. It was conveyed into Staffordshire by sea and canal, and mixed with pounded flint, upon this article coming into use. This compound was, however, held liable to crack if highly fired or suddenly heated.

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* Macpherson's Annals of Commerce.

† Dublin Penny Magazine, vol. iv, p. 28.

‡ History of Pottery, p. 148, 178.

§ Thoresby's Ducat Leeds, p. 196.

|| Brit. Rom. Devonshire, p 291.

Distant parts of the country were occasionally supplied with this brittle ware, as is evidenced by the pipes of John Hunt, with his name in full (a rare occurrence) upon the spur, in Staffordshire and in London, as well as in our own neighbourhood at Great Meols. He was probably a Staffordshire man, but it is thought that several members of his family wrought elsewhere—pipes of *Jeffry Hunt* being common in Somerset, and others of *Thomas Hunt* occurring in Wilts. Makers' marks appear on most of the pipes of the 16th and 17th centuries, occasionally on the breast of the bowl, rarely on the stem, but generally on the base of the spur. Aubrey mentions a manufacturer named *Gauntlet*, who impressed his ware with a representation of that article. The trade was sometimes united with others, as at Saffron Walden, in Essex, where in the 17th century we find William Leader making the copper tokens of the period, in addition to clay pipes; and he not improbably also manufactured the curious pins (if they may be so termed), formed likewise of fine pipeclay, and used by barbers of that and the succeeding century for curling the hair. They have often been mistaken for tobacco-stoppers. Many scores of these articles have been found in ledges within chimneys of the older houses in the town, and a few examples have been selected for exhibition, including one bearing the potter's initials, *W.B.* At one period the Winchester pipes appeared to have been in great request, Ben Jonson noticing them as considered the best in his day. Of this, or somewhat earlier date, is the curious article in crockery, termed a *Tantalus, or puzzle cup*, now shown. Though of fair size, it was not calculated for holding above a pint, owing to the thickness of the material and the open ornamentation, which includes a couple of grotesque human faces, devices from cards, the Freemasons' square and compass, and, lastly, a couple of pipes, conveying, rudely formed as they necessarily are, a tolerable idea of the smoking utensils of the day. The cup was emptied by an orifice carried upward through the handle, which terminated in hollow projections on the apex of the vessel, two of them being closed by the fingers, whilst the power of suction was applied to the third. These objects were evidently more for show than use, and usually occupied places on the prominent shelves of public houses. Mr. Joseph Clarke informs me that the older specimens are now but rarely met with. Some were, however, made by Messrs. Wedgewood and Turner in Staffordshire; and others, though very rudely, by another potter of the same county.

Potters' Marks found upon early Pipes.

Cheshire and Lancashire.

AB—B—D—IB—ID—IOHN HVNT—PL—RL, with a star above and crescent below—TC—TH—TP; all stamped on the spur. EB, surmounted by a tree—GL, within a boot-spur—IB, in similar mark—IB, with a crescent; upon breast of bowl.

Somersetshire.

HENRY PVTLEY—JEFFRY HVNT, common—RC or G on stem—RICHARD GREENLAND.

Yorkshire.

ASQVITH, of Hull, early in 16th century—HAIRCY—HILTON—PINCY—SCOTT—G. C. (George Cullom) within a heart—R. F. (Rich. Fitton), a wheat-sheaf between; all upon the spur. ✠ ✠ upon either *side* of spur, a very uncommon position. IH with the spur intervening—RB/H (Robert Blythe of Hull, cir. 1690) upon breast of bowl.

Miscellaneous.

Chiefly Staffordshire, in the collection of W. J. Bernhard Smith, Esq.

BEN. LEGG—CB—CR, a gauntlet sometimes between—ED. HIGGINS—EK—EL—HP—FE—IOHN HVNT—JOHN JONES—JOHN JAMES—IL—IM—IP—IOHN LEGG—IOHN ROBERTS—IANE OVERTON—IOSEPH HVGHS—MICH. BROWN—M—MD—MORRIS. D.N—OF—RL—RANDLE MORRIS—THOM. EVANS—THOMAS HVNT—TI—WB, a gauntlet between—WILL. DARLEY—WM—the same, with each letter crowned—WC/✠ each crowned by stars within a heart.

Marks without names or initials.

A plain gauntlet—ditto on shield—ditto on heart—a cross—crosslet—a star, fleur-de-lis, &c.

therefore how easy for a person to believe he had discovered opium where none existed. For these reasons I am of opinion that Government should specially appoint a sufficient staff of competent toxicologists, whose sole occupation should be to examine poisoning cases, and that a certain number should be named to act in concert in each instance.

By the adoption of this course unjust blame to science would be avoided: neither should we be under the necessity of grieving for the consequences which arise, when the investigation of such cases is entrusted to persons who are not thoroughly acquainted with the subject; nor of doubting the justice of a sentence by which the innocent were acquitted or the guilty condemned.

PROCEEDINGS.

TWELFTH SESSION, 1859-60.

ANNUAL GENERAL MEETING.

St. George's Hall, 18th Oct., 1859.

WILLIAM BROWN, Esq., Vice-President, in the Chair.

The Secretary read the following

REPORT.

It is the pleasing duty of the Council to report, at the close of their year of office, that the Eleventh Session of the Society's labours has been marked by satisfactory progress, both in the number and character of the papers submitted to the members. These are given more or less in detail in the volume of Transactions, which is now nearly ready for delivery; and they confidently anticipate that, like its predecessors, it will meet with the approval of the members.

During the past year, no event has occurred, in relation to the Society, requiring special notice; the usual duties have all been performed, and the accustomed intercourse with other Societies maintained. The Library has also been open to members from five to seven o'clock on the evenings of meeting.

The Treasurer's balance sheet shows that, in addition to a balance of £10 5s. 2d. remaining over from the previous year, the sum of £373 12s. 10d. has been received, and £369 1s. 10d. paid. The working expenses have remained much as usual, and there is a balance in hand of £14 16s. 7d.

During the past year, the Council acted on the recommendation of their predecessors in submitting to the Society the names of certain defaulters, who, after due notice, were erased from the roll of the Society, in accordance with Law XII. They recommend that the accumulation of arrears be prevented as much as possible, and, with that object, that Law XII be strictly enforced. The apparent and actual revenue will then be identical, and all arrangements for the benefit of the Society can be made with much greater definiteness.

It has been thought desirable to diminish the price of the early volumes of Proceedings and Transactions, until the stock is reduced to a limited number of copies; the amended scale of prices will accompany the volume about to be issued.

The Society's Excursion this year was made to the town of Bolton, and to the Waterworks of the Corporation of Liverpool at Rivington Pike. A brief account of it will be found in the appendix to volume XI.

The balloting lists required by the laws have been prepared and forwarded. It will be noticed that the Council have suggested some slight changes in the honorary officers. The gentlemen nominated to take the places of those who retire, as well as those named for the customary vacancies in the sections, are willing to serve, if elected, and are all known as valuable members of the Society.

It was moved by the Rev. R. R. MOORE, B.A., seconded by THOMAS B. RYDER, Esq., and resolved unanimously :—

> That the Report now read be adopted, and printed and circulated with the Proceedings of the Society.

The following Statement of Accounts having been read,

It was moved by PETER R. M'QUIE, Esq., seconded by WM. BURKE, Esq., and resolved unanimously :—

> That the Treasurer's Statement of Accounts be passed, and printed and circulated with the Proceedings of the Society.

THE HISTORIC SOCIETY OF LANCASHIRE AND CHESHIRE *in account with* THOMAS AVISON, *Treasurer.*

Dr.

	£	s.	d.	£	s.	d.
THE VOLUMES :—						
Vol. x.—T. Brakell, printing	9	10	0			
Maclure and Co., lithographing..	9	18	0			
Distributing	5	7	3			
				24	15	3
Vol. xi.—Thomas Brakell, printing	130	1	0			
Chaloner & Lawson, lithographing	21	2	0			
				151	3	0
SESSIONAL EXPENSES :—						
T. Brakell, printing circulars, &c., Session X	16	17	0			
Do., do., Session XI ..	9	6	0			
H. Shimmin, bookbinding	1	15	9			
G. J. Poore, stationery ..	3	6	6			
Rent of Library and Insurance	31	0	0			
Rent of St. George's Hall..	15	15	0			
Refreshments at meetings	12	5	0			
Advertising meetings	4	10	11			
Assistant Secretary	50	0	0			
Commission, making up accounts, &c.	18	9	7			
Postages, parcels and miscellaneous	19	12	2			
				182	17	11
PERMANENT CHARGES :—						
Papworth's Heraldry	1	1	0			
Chaloner and Lawson, for Receipt Books	2	5	0			
				3	6	0
SPECIAL EXPENSES :—						
Excursion to Rivington ..	6	6	3			
Circulars for ditto.....	0	13	0			
				6	19	3
				369	1	5
BALANCE in Treasurer's hands				14	16	7
				£383	18	0

Cr.

	£	s.	d.
Balance from last account	10	5	2
By Receipts in Session XI, viz. :—			
Entrance Fees	14	14	0
Annual Subscriptions, Session XI..	283	9	0
Ditto, ditto XII..	2	12	6
Arrears	59	12	0
Life Composition.....	5	5	0
Books sold	7	13	6
Extra Binding for Volumes.....	0	6	10
	£383	18	0

Examined by

S. GATH,
P. R. M'QUIE, } AUDITORS.

(E. and O. E.)

Liverpool, 18th October, 1859.

THOMAS AVISON.

It was moved by THOMAS B. RYDER, Esq., seconded by J. R. JAGO, Esq., and resolved unanimously :—

> That the thanks of the Society be given to the Officers and Sectional Members of the Council, for their services during the past Session.

It was moved by SAMUEL HILL, Esq., seconded by the Rev. THOMAS MOORE, M.A., and resolved unanimously :—

That the thanks of the Society be given to Joseph Mayer, Esq., F.S.A., for his donation of eight illustrations for the annual volume for the past year.

A ballot having been taken for the Officers and Sectional Members of Council, the result was announced from the chair. (See page v.)

Thanks were conveyed by acclamation to the Chairman, for his services during the evening, on the motion of the Rev. Dr. HUME, seconded by P. R. M'QUIR, Esq.

3rd *November*, 1859. ARCHÆOLOGICAL SECTION.

JOSEPH MAYER, F.S.A., V.P., in the Chair.

The following donations were presented :—

From the Society. Report of the Cambridge Antiquarian Society, No. IX, May, 1859.

From the Committee. The Annual Report of the Committee of the Birkenhead Free Public Library, 1859.

From the Society. Transactions of the Essex Archæological Society, vol. ii, part 1, 1859.

The following objects of interest were exhibited :—

By the Rev. Dr. Hume. A curious statuette in bronze, procured near Rome. Two specimens of Etruscan glass; the one with white and blue twisting, the other exhibiting a beautiful iridescence.

By Mr. Newton. An old printed book, with many curious woodcuts and illustrations, entitled "Horæ Beatæ Mariæ Virginis," Paris, 1524—the property of Mr. J. E. Hodgkin.

The following Paper was read :—

ON THE POEMS OF OISIN, PART II,* *by Professor Connellan, of Queen's College, Cork.*

10th *November*, 1859. LITERARY SECTION.

A. CRAIG GIBSON, Esq., in the Chair.

The following donations were presented :—

From the Society. Journal of the Statistical Society, vol. xxii, part 2.

From M. De Perthes. "Le Pilote de la Somme," French newspaper for the 18th and 28th October respectively; and "L'Abbevillois," French newspaper for 16th June and 7th July.

From the Author. A Dissertation on Irish Grammar, by Owen Connellan, Irish historiographer to His Majesty; Dublin, 1834.

From the Author. Le Raphael de M. Morris Moore: Apollon et Marsyas: par Léon Batté.

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* See Vol. XI, page 97.

From the Society. Proceedings of the Liverpool Philomathic Society, 1858-59.

From Mr. Richard Hunt. Lectures on the History of England. Lecture I. By William Longman, 1859.

From the Rev. Dr. Hume. Copy of a Map constructed by the donor from calculations founded on the Census of Religious Worship, 1851, and printed by order of the Select Committee of the House of Lords on Church Rates, 1859. The map is colored to shew the proportion of members of the Church of England, Dissenters and Roman Catholics, and of persons not connected with any worshipping body, in the principal cities and towns of England and Wales, and in the whole of England and Wales collectively.

The following objects of interest were exhibited:—

By Mr. Mott, in illustration of his Paper. A large number of the most valuable or remarkable books published in Liverpool.

By Mr. Newton. Cicero de Officiis, &c., printed at Rome, 1468. Das Evangelibuch, a work in German on the four Gospels, printed at Strasburg in 1507, with many curious large woodcuts. Sir T. More's Treatise on the Veneracyon and Worshyp of Ymages and Reliques against Tyndale, 1530.

By the Rev. Dr. Hume. A box of Chinese printing-blocks and a Chinese book.

The following Paper was read:—

On Books published in Liverpool, *by A. J. Mott, Esq.*

17th November, 1859. SCIENTIFIC SECTION.

William Brown, Esq., V.P., in the Chair.

The following donations were presented:—

From Lt.-Col. J. D. Graham, U. S. Topographical Engineers. Map of Chicago harbour and bar, Illinois, U. S. A.

From the Society. Proceedings of the Geographical and Polytechnic Society of the West Riding of Yorkshire, 1858-59.

From the Society. Annual Report of the Leeds Philosophical and Literary Society for 1858-59.

From the Society. Smithsonian Report for 1857-58.

The following objects of interest were exhibited:—

By Mr. H. Newton. A stereoscope and series of views.

By Mr. Keith. Woodward's solar camera. Photographic lenses. Photographs of Furness Abbey.

By Mr. Cross. Various photographs by Fenton and others.

By Mr. W. G. Helsby. Twenty-five Daguerreotype views from Chile.

The following paper was read:—

A Description of some of the principal Optical Apparatus used in Photography, *by Thomas Sutton, B.A.*

1st December, 1859. ARCHÆOLOGICAL SECTION.

JAMES STRAINS, Esq., in the Chair.

The following gentlemen were duly elected members of the Society:—

P. B. Ainslie, F.S.S.A., Guildford.

W. Romaine Callender, Jun., Banff House, Rusholme, Manchester.

John Elliott Hodgkin, Hayman's Green, West Derby.

W. J. Legh, M.P., Lyme Park, Stockport.

John Marsh, St. Helen's.

Rev. T. H. Thicknesse, Deane Vicarage, Bolton.

The following donations were presented:—

From the Author. Annals of the Wars of the Eighteenth Century, vol. IV, by the Hon. Sir Edward Cust, D.C.L., Major-General in the British Army.

From the Society. Journal of the Royal Asiatic Society, vol. xvii, part 1.

From the Society. Bulletin de la Société Archéologique de l'Orléanais, Nos. 31, 32 and 33.

From the Brotherhood of the Rosy Cross, Manchester. The Tree of Common Wealth: a Treatise by Edmonde Dudlay, Esq., Barrister-at-law; some time Speaker of the House of Commons; President of the Privy Council of Henry VII; and one of that King's Commissioners for receiving the Forfeitures of Penal Statutes. Written by him while a Prisoner in the Tower, in the years 1509 and 1510, and under sentence of death for high treason. Now first printed from a copy of his manuscript. 1859.

The following objects of interest were exhibited:—

By Mr. H. Ecroyd Smith. Impressions and casts from the coins, seals and pilgrims' signs found upon the sea shore of Cheshire, and illustrative of his Paper. Several valuable Roman fibulæ (some being enamelled) from the same locality, and a bottle containing illustrations of the various strata, natural and artificial, at the chief antiquarian site.

By the Rev. Dr. Hume. Four photographic portraits of historic characters in England and Scotland.

By Mr. T. Dawson. Various books published in Liverpool, including a translation of Horace, by Dr. Greene, 1777, and an English Grammar, 1765.

By Mr. H. Gerard. Poliphili Hypnerotomachia (with numerous illustrations), 1467.

The following Papers were read:—

ON COINS, SEALS AND PILGRIMS' SIGNS, FOUND UPON THE SEA SHORE OF CHESHIRE, *by Mr. H. Ecroyd Smith; and* THE CHIMERAS, PART II,* *by Lieut.-Gen. the Hon. Sir Edward Cust, D.C.L., President.*

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* Transactions, p. 99.

8th *December*, 1859. LITERARY SECTION.

P. R. McQuie, Esq., in the Chair.

The following donations were presented:—

From the Society. Journal of the Statistical Society, vol. xxii, part 3.

From the Society. Journal of the Society of Arts, Nos. 339 to 364.

From the Society. Bulletin de la Société Française de Photographie, No. 4.

From the Author. Character of the Liverpool Town Museum, with suggestions for its interior arrangement, by the Rev. A. Hume, D.C.L.

The following objects of interest were exhibited:—

By Mr. J. Newton. A series of large wood cuts by Albert Dürer, dated 1504, illustrative of events in Scripture history.

By Mr. A. Shute. Two ancient flint arrow-heads, found in Birkendead in 1819, on the site of the present docks. A fragment of tesselated pavement found at Cape Carthage.

The following Paper was read:—

The Chimeras, Part III,* *by Lieut-Gen. the Hon. Sir Edward Cust, D.C.L., President.*

15th *December*, 1859. SCIENTIFIC SECTION.

P. R. McQuie, Esq., in the Chair.

The following donations were presented:—

From the Society. Memoirs, vol. xvii, and Notices, vol. xviii, of the Royal Astronomical Society.

From the Society. Quarterly Journal of the Geological Society, vol. xv, parts 3 and 4.

From Mr. Moss. A fragment of stone with the mortar adhering to it, from the camp near Alexandria, Egypt. A piece of stone from Mount Lebanon, with fossil remains of small fishes on one surface.

The following objects of interest were exhibited:—

By Mr. G. Reid. The model of a carbon-test, for ascertaining the amount of foulness in air. Models of an improved method of ventilating public buildings and dwelling houses.

The following Paper was read:—

On a systematically arranged Border for Plants,† *by the Rev. Henry H. Higgins, M.A.*

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* Transactions, p. 99. † Transactions, p. 75.

5th January, 1860. ARCHÆOLOGICAL SECTION.

WILLIAM BROWN, Esq., V.P., in the Chair.

The following donations were presented:—

From the Society. Publications de la Société pour la Recherche et la Conservation de Monuments Historiques dans le Grand Duché de Luxembourg. Année 1857.

From the Society. Proceedings and Papers of the Kilkenny and S. E. of Ireland Archæological Society, vol. ii, N.S., Nos. 19 and 20.

From the Author. Remarks on a line of Earthworks in the parish of Tidenham, Gloucestershire, known as Offa's Dyke, by George Ormerod, D.C.L., F.S.A.

From M. de Perthes. "Le Pilote," French newspaper, for the 11th November, 1859.

The following objects of interest were exhibited:—

By Mr. W. G. Helsby. A numerous collection of relics, illustrative of the domestic habits and funeral customs of a tribe of the aboriginal inhabitants of Peru, consisting of the mummies of a female and two infants, various cooking and other household articles, and miscellaneous objects. As it is said that no interments have taken place in the burial ground where the mummies were found since the discovery of Peru by the Spaniards, Mr. Helsby assumes that they have been interred over three hundred years.

The following Paper was read:—

ON THE POPULAR CUSTOMS AND SUPERSTITIONS OF LANCASHIRE, PART II,* *by T. T. Wilkinson, F.R.A.S.*

12th January, 1860. LITERARY SECTION.

WILLIAM BROWN, Esq., V.P., in the Chair.

The following gentlemen were duly elected members of the Society:—

W. H. P. Bath, 146, Crown Street.

Adam Holden, 52, Church Street.

The following donations were presented:—

From the Watch Committee of the Liverpool Town Council. Report on the Police Establishment and the State of Crime, with Tabular Returns, for the year ending 29th September, 1859.

From the Society. Proceedings of the Literary and Philosophical Society of Liverpool, No. 13. 1858–59.

From Mr. T. T. Wilkinson. Merlini Anglici Ephemeris, or Astrological Judgments for the years 1674–77, by William Lilly, Student in Astrology. The Lady's and Gentleman's Diary for 1860.

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* Transactions, p. 66.

The following object of interest was exhibited:—

By Mr. Mayer. The original Privy Council Warrant, issued by King William III, for payment "unto John Ince, gent., or to his assignees, the sum of £341 "0s. 10d., to compleat the payment and satisfaction of all Charges and Ex- "pences for or concerning the passing and Execucon of the Commission for "taking Subscriptions to the Bank of England or the passing of the Charter "for Incorporating of the said Bank, which were agreed to be paid by Us," bearing date Kensington, 18th March, 1694-5.

The following Papers were read:—

On the Freedom of the Labour Market, *by Samuel Hill, Esq.; and* On the Census of Religious Worship for England and Wales,* *by the Rev. A. Hume, D.C.L., &c.*

19*th January*, 1860. SCIENTIFIC SECTION.

Joseph Mayer, F.S.A., V.P., in the Chair.

This meeting was held at the Museum of National and Foreign Antiquities, by invitation of the proprietor, Mr. Mayer, and was attended by a large number of members and their friends, including ladies; the usual routine business was therefore postponed. After an inspection of the Museum the company assembled in the principal room, when

The following Paper was read:—

On the importance of Public Museums for Historical Collections,† *by C. Roach Smith, F.S.A., &c.*

2*nd February*, 1860. ARCHÆOLOGICAL SECTION.

Joseph Mayer, F.S.A., V.P., in the Chair.

The following donations were presented:—

From the Society. Mémoires, 1857, Bulletins, 1858, de la Société des Antiquaires de l' Ouest.

From the Society of Antiquaries of Scotland. Address by the Hon. Lord Neaves at the conversazione meeting of the Society, 23rd December, 1859.

From the Duke of Northumberland, K.G. Surveys of the Roman Wall and other Remains in the North of England, made in the years 1852–54 by his Grace's direction: with memoir.

From Mr. John Dixon, Whitehaven. A plaster cast of the inscription on a pillar in the churchyard of Beckermont, Cumberland, marking the burial-place of Tuda, a Saxon bishop, who died A.D. 664.

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* Transactions, p. 1. † Transactions, p. 117.

From Mr. Craig Gibson. A Glossary of Cumberland Words and Phrases, by Wm. Dickinson, F.L.S. The Old Man, or Ravings and Ramblings round Coniston.

From Mr. Surr. An original impression of the Great Seal of England during the reign of James I. The obverse inscription is "Jacobus Dei gratiâ Angl. . "Hiberniæ rex fidei defensor;" the reverse, "Jacobus Dei gratiâ Angliæ "Scot . . . . berniæ rex fidei defensor." On the obverse side is represented the king sitting on a throne surmounted by a canopy, and having in his right hand the royal sceptre, at the top of which is a fleur-de-lis; in his left hand, resting on his knee, he holds a globe surmounted by a cross. On the right of the throne sits a lion, and on the left a unicorn, over each of which supporters are the royal arms, quartering first, France and England; second, Scotland; third, Ireland; fourth, France and England, within a garter with the motto "honi soit qui mal y pense," over which is a crown. On the reverse is the king on horseback with shield and sword, both horse and rider fully armed. On the dexter side is the York and Lancaster rose surmounted by a royal crown; on the sinister side a fleur-de-lis, surmounted by a crown; and in the field a greyhound, one of the badges of the house of Stuart.

The following objects of interest were exhibited:—

By Mr. T. Dawson. Various scarce books and engravings, including a Descriptive Poem on the Town and Trade of Liverpool, dated 1789; plans of harbours, bars, bays and roads in St. George's Channel, by Lewis Morris, 1748; and Georgii Agricolæ de re Metallica, Libri xii, 1561.

By Richard Pedder, Esq., Preston. A transcript of a Diary kept by Thomas Tyldesley, who lived in the neighbourhood of Lancaster at the beginning of the last century. The following extracts will serve to shew in what degree the journal illustrates the domestic and social manners of the period:—

"*Marc*A 25, 1712.—Went with Mrs. to Booke to pray^{rs} and Home To din^{r} Afterwards wentt A fowling To Lan^{r} and Aldclife Marcs and to see Ashton Gardens thence Home.

26: Al day in Town A bussy in improving ye Dame Garden.

27: very Bussy Gardening with 3 workmen Hen: Copland: Hen: Parkinson: and John: Cradson. p^{d} Mrs Tomkinson po (*pro*) Ale 6 quarts 2^{s} gave Mrs 4^{s} 6 to bye candles p^{d} ye Workmen 2^{s} 6: soe to beed: I weried: 0 : 9 : 0

28: Wentt as fare as Ellel Milles to meet Mr Rostron High Sheriffe went with him after din^{r} to meet ye Judge: * * I suped with ye Sheriffe And Thos (*Aimself*) is very well beloved yet. Assizes were soe slend^{r} that only 5 was to 15 dishes off meatt viz. Mr Sheriff Mr Nowell of Read M: Farington of Shaw hall Parson Parkes And y^{e} *Old: Dog: Lad:* (*Aimself.*)

Ap^{ll} 2: Att my Returne I went to ye Kings Armes and got my din^{r} with Bro^{r} wee spent 1^{s} Apice in Whitte Wine, and as wee went through ye Hall met with Just: Long—th Capt Veale Just: Pearson Franke Nickinson and small L^{d} of Roshall wee were very merry upon ye small Lord: and spent 1^{s} A pice in sack and whit wine, w^{h} Elivated ye petite L^{d} that beffor bee wentt to beed Hee Tucke ye ffreedom off Biting His Man Sbarocke Thumb of Just beyond ye Nale: 0 : 2 : 0

3: Blessed Bee The Holly & *undivided* Trinaty For ever more For The Mireyfull preserveing & Bring mee To ye Age off 55 years. Amen.

7: Went to ye Kings Armes p^{d} po: A pottle of ehars & A barell off Cockles caring To Orfford 1^{s} 6 and Gave Honest Tom Baddeley To: Matts man 2 pintts of Ale and spentt one pint with Rob. Gibson & Hurb^{d} Gillison. Spent 3 ob. att Hen: Wayles. Thence Home: In the Eveing went with Mrs. and Nan: T. to Beardsworths to A dansing Mr. One Mr. Powson. Gave him 5^{s} for part. Spent 2 ob. Soe Home: 0 : 7 : 5

24: al morning in the house Mr Madrell A Mankes Marcant And both Apothecary Surg^{tt} & Atturney at home Dined with us About 6 went to meett Mr. Bimson at hen: Wayles where Mr Madrell and Evan Williams came to us ye Skip^{r} of ye Mankes ffrigott of 12 tuns: and about 9 when wee should have gon home came up Jack Thornton who stayed us till 2: I spent 5^{s} 6: and Tucke Skip^{r} Evan home with mee: 0 : 5 : 6

25: Al morning in the house gave Evan Williams 8 Duble botles to fill with Brandy: gave him A pice of Beaff to take with him to Iland.

May 5: Gave Litle Jackey Charles and Sara Roskeall 6^{d} as a ffaring.

13: about 8 in ye mornig went over Rible to Ormskirke Race, where were A greatt company off the best in ye county: p^{d} po: meatt and Drinke po: man and selfe 1^{s} 6 and then went backe with Ned Winckley to Banister hall: but spent p: viam att Bancke bowling here 1^{s} 0 : 2 : 6

21: affter Din^{r} according to invitation, Bro^{s} peninton ffrost and I went to crooke to keep Bro^{r} Daltons Birth Day but Tucked neth^{r} Meat Nor Drinke and all wee had ffor our Journey was to see two poor fflookes taken in ye Leske holl, att length Mr. Dalton came who offered to Goe with us to Cond^{r} Green where he gave us leave to pay each 1^{s} beaing ye sum dranke: Gave M^{rs} 5^{s} to bye Sug^{r} &c. Gave M^{rs} 8^{s} to by Turf Colles, &c. 00 : 14 : 0

28: went early in the morning with my M^{rs} To houme (*Hulme*) in Westmorland to see Bro^{r} and Syst^{r} ffrost where wee ffound they^{r} Unkle a very odd miserable ffellow and his house as prop^{r} ffor ye person as the stye is ffor y^{tt} Beast my Bro^{r} came backe with us to burton where hee Treated us very generously Honest Cos: Barton beeing with us."

The chairman exhibited a snuff-box which formerly belonged to Richard Chorley, of Chorley in Lancashire. It is one of those relics of the Rebellion of 1715, by means of which the adherents of the Stuarts recognised one another: it is round, and without is enamelled the royal Stuart plaid; inside is a false lid, on which is painted a portrait of the Pretender, so that a pinch of snuff "for the "good cause" could be offered to a Hanoverian partisan, without displaying the miniature, and so betraying the owner. This Richard Chorley was tried, after the Rebellion was suppressed, for high treason, along with his son and many others; and having been found guilty, most of them were sent to London and there executed; but as Chorley senior was thought to be so old and infirm that he would not survive the hardships of such a journey, he was ordered to be hanged in Liverpool. Mr. Mayer possesses a MS. account of these circumstances, which may be seen at his Museum of Antiquities. The following accounts explain themselves:—

An Account of the Disbursements of Thomas Crisp Esqre High Sherriff of Lancashire attending the Tryall of the Rebels at Leverpoole of executing 34 of them. Conveying Prisoners making Conveniencies and finding straw and other necessaries for them at Leverpoole and elsewhere which amount as follows vizt.

1715.

Dec. 31.	Payd for Messengers about the preicepts to hasten y^{m} out	0	12	0
	Payd Sending the Preicepts out to the severall hundreds in the County and printing Tickets	1	15	6
	Payd the like at Preston from the Office there	1	17	0
	Payd the charge of the Undersheriffe a Trumpeter and some Sheriffs men, to wait on the Judges from Warrington ..	7	10	0
	Payd the charge of Messengers from Leverpoole about the returns of the Preicepts.....	0	13	6
	Payd the charge of sending to the officers at Manchester to get guards to convey five Prisoners to Preston to be Executed	0	7	6

January 26.	Payd the charge of Horses and Men to lead the Horses &c. on conveying them thither	0	5	9
	Payd for Cords to pinion them	0	2	6
Feby 6.	Payd for Messengers for other Guards to convey 7 more to Preston, 5 to Wigan and 5 to Manchester to be Executed	0	11	0
	Payd the charge of men and horses on the conveying the 7 to Preston	0	6	9
	Payd the charge of the like on the conveying 5 to Wigan	2	6	6
	Payd the charge of horses and men to lead them on the conveying 5 to Manchester	3	7	6
	Payd the Smith for Irons, fetters &c. for the Prisoners	3	19	4
	Payd for Carpenters work making guard beds and conveniencies for the Prisoners and Soldiers at Leverpoole	15	7	6
	Payd for Straw for them	4	4	6
	Payd for Coales for them	1	10	3
	Payd for Brickwork building up the windows &c. to prevent Escapes	7	0	7
	Payd for candles &c for the Guards and Prisoners	17	19	9
	Payd for men to attend and guard the condemned Prisoners which the military forces required from the Sheriffe	12	0	0
	Payd two men attending the other Prisoners cleaning rooms &c.	6	12	0
	Payd for a Cellar and Rooms for the Prisoners and Soldiers	13	0	0
	Payd for Rooms for the Witnesses that are Prisoners	10	0	0
	Payd for Coales, Candles and Straw &c. for them	9	10	0
	Payd for a man to attend them and clean rooms &c.	3	10	0
	Payd for candles used in court	1	1	8
	Payd a person that attended and cleaned the Court	1	10	0
	Payd for wine for the grand jury &c. and other disbursements about them for their room, grate coles &c. 30 days	82	8	8
	Payd for Ale for them	6	7	6
	Payd for persons to attend them &c.	2	10	0
	Payd one days dinner for them	15	7	5
	Payd the charge of 17 men and horses 38 days attending at Leverpoole at 4s. per day each man and horse	129	4	0
	Payd for Hatts, Stockings and other p^t of their Liveries worn out	17	9	6
	The High Sheriffs charge and expence not included			
	The Undersheriffe and his Deputy attending expences &c. not included			
	Payd the charge of the Sheriffes men &c. attending Judges to Warrington on their return back	12	0	0
	Four Sheriffs Bailiffs attending 4s. ℔ day each 33 days	26	8	0
	The Gaoler and his servants attending, Expences &c.—he charges upwards of	50	0	0
	Payd Messengers for Guards to pay all the remaining condemned prisoners from Leverpoole to Lancaster and about 20 that were committed over to Lancaster	0	10	0
	Payd for cords, and tying the Prisoners	1	0	8
	Payd for horses for them that would not goe on foot and for men to lead them &c. being 17 by the first guard and 16 on horseback by the second guard	25	0	9
		495	7	7

1716. *The charge of executing 34 Rebels.*

January 27.	Erecting gallows and paid for materialls, hurdle, fire, cart &c. on Executing Shuttleworth, and 4 more at Preston, and setting up his head &c. besides the Undersheriff and Goalors	0	12	4

Feby. 9.	Disbursments on Executing old Mr. Chorley and others, and setting up a head &c. Besides the Undersheriffs ..	5	10	6
10.	Charge at Wigan on Executing Blundell &c.	7	1	2
11.	Charge at Manchester on Executing Tyddall &c.....	8	10	0
16 & 18.	Charge at Garstaing and Lancaster on Executing 4 at either place	22	0	0
	Besides the Undersheriffs.....			
25.	Charge of Executing Bennet and 3 more at Leverpool	10	3	0
	Payd the 2 Executioners	60	0	0
	Payd for Horses to carry the Executioners to the severall places of Execution and their travelling charges	7	10	0
		121	7	0

The following Paper was read:—

On the Poems of Oisin, Part III,* *by Professor Connellan, of the Queen's College, Cork.*

9th February, 1860. LITERARY SECTION.

P. R. McQuie, Esq., in the Chair.

The following gentlemen were duly elected members of the Society:—

George E. Holt, 3, Union Court.
Charles Powell, Commander, R.N., H.M.S. *Conway.*

The following donations were presented:—

From the Society. Proceedings of the Royal Society, vol. x, Nos. 35, 36 and 37.

From the Society. Proceedings of the Royal Dublin Society, Nos. 12, 13, 14 and 15. 1859.

The following objects of interest were exhibited:—

By Mr. T. Dawson. Book of the Brazen Gates of the Church of San Giovanni, Florence. The Dutch Fortune-teller, discovering Thirty-six several Questions, which Old and Young, Married Men and Women, Batchelors and Maids delight to be resolved of; brought into England by John Booker, 1714. Several rare books in the Latin language, including one dated 1519 and another dated 1530.

The following Paper was read:—

On the Population of Lancashire and Cheshire, and its Local Distribution during the Fifty Years 1801–51,† *by J. T. Danson and T. A. Welton, Esqrs. Part Fourth and Last.*

16th February, 1860. SCIENTIFIC SECTION.

P. R. M'Quie, Esq., in the Chair.

The following donations were presented:—

From the Society. Proceedings, Nos. 3, 4, 5 and 6, vol. iii, and Journal for 1858, of the Royal Geographical Society.

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* See Transactions, vol. xi, p. 97. Parts ii and iii are not printed in this volume, the author desiring to reserve them for publication under the auspices of the Ossianic Society of Dublin.

† Transactions, p. 35.

From the Society. Journal of the Geological Society of Dublin, vol. viii, part 2.

The following objects of interest were exhibited :—

By Mr. J. Newton. A collection of ancient woodcuts by Albert Dürer, Cranach and others. Several etchings by L. van Leyden and Albert Dürer. A specimen of the Anorthscope, a new optical instrument.

The following Paper was read :—

On the Flora of Preston and the Neighbourhood,* by *Mr. C. J. Ashfield.*

1*st March*, 1860. ARCHÆOLOGICAL SECTION.

James Kendrick, M.D., in the Chair.

The following donations were presented :—

From the Society. Archæologia Æliana; or Miscellaneous Tracts relating to Antiquity. Published by the Society of Antiquaries of Newcastle-upon-Tyne. Parts 13, 14 and 15, N.S.

From the Chairman. On British Antiquities discovered in Lancashire, and deposited in the Museum at Warrington, by H. Syer Cuming, Esq., Hon. Sec.

The following objects of interest were exhibited :—

By the Chairman. A piece of oak, about seven inches square, part of the lintel of the fire place in the kitchen of the house in Henley Street, Stratford-upon-Avon, formerly in the possession of the Shaksperes, in the upper room of which our immortal poet is said to have been born It had been intended to convert this piece of oak into a casket of the period, but on the carpenter cutting into the block a cavity was discovered, made by a large auger and carefully plugged up at the opening. In this cavity was discovered the square shaft of a small wooden cross, raised upon a pediment of five circular steps. The cross, which had been slightly injured by the saw, is 1¼ inch in height and ⅞ of an inch broad at the base, and when found was carefully enveloped in coarse tow, in which were two or three grains of barley. In Dr. Kendrick's opinion, this relic strongly substantiates the authenticity of a MS. discovered in 1770 in the ceiling of the same house, purporting to be a confession of the faith of John Shakspere (father of William) "an unworthy member of the holy Catholic "religion." This document, although at first considered genuine by Malone, was subsequently discredited by him, but the recent discovery of the cross, doubtless a sacred relic secreted when the laws were stringent upon Roman Catholics, ought, Dr. Kendrick suggests, to re-open the question of the genuineness of the MS., if still in existence.

By Mr. T. Dawson. A Genuine Collection of all the Papers, Addresses, Songs, Epigrams and Acrostics printed by all parties during the late Contest for the Representatives in the ensuing Parliament for the Borough of Liverpool, which began on Tuesday, March 31st, and ended April 6th, with some curious MSS. To which is added an Alphabetical List of the Poll. Liverpool: printed by R. Williamson, near the Exchange, 1761. An Entire and Impartial Collection of all the Papers, &c., published on both sides (on the same occasion).

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* Transactions, p. 127.

Liverpool, 1761. The Poll for the Election of Members of Parliament for the Borough of Liverpool, Saturday, 28th May, 1796, to Wednesday, 1st June: Also, Addresses, Songs, Squibs &c. The Act of the 7th Geo. I, for making the River Weaver navigable; and 33rd Geo. II, to amend the foregoing. Sermons and Discourses on several Subjects and Occasions, by Richard Richmond, LL.D., Chaplain to his Grace the Duke of Atholl, and Vicar of Walton, Lancashire, 1764. An oil painting of the burning of the Goree Warehouses, by Solomon, of Liverpool. Two oil paintings of the North and South Shores of Liverpool, taken on the spot by J. Morris, 1831.

The following Paper was read :—

AN ANALOGY BETWEEN THE GENESIS OF MAN AND THAT OF THE SOLAR SYSTEM,* *by Henry Johnson, M.R.C.S.*

8th March, 1860. LITERARY SECTION.

JOHN ROBSON, M.D., in the Chair.

The following donations were presented :—

From the Society. Proceedings and Papers of the Kilkenny and S.E. of Ireland Archæological Society, vol. ii, N.S., Nos. 21, 22 and 23.

From the Archæological Institute. The Archæological Journal, No. 62, 1859.

From the Society. Proceedings of the Society of Antiquaries of Scotland, vol. ii, part 3.

The following objects of interest were exhibited :—

By Mr. J. R. Hughes. MS. Almanac of the year 1760, containing notices of various matters locally interesting.

By Miss Drinkwater, Rodney Street, through Mr. Mayer. A remarkable carving in box-wood, representing St. Michael the archangel destroying the seven-headed dragon, which stands in the foreground; on the left is the Queen of Heaven, standing on the crescent, crowned with stars and surrounded with rays of glory. Over the figure of St. Michael is a representation of the Almighty, or God the Father, who is mitred, and with the right hand upraised in the act of benediction; his left hand is over the head of the Saint, whom he appears to be protecting against the evil machinations of the dragon. On the upper corner of the group is the head of an angel, and in the left-hand corner a sarcophagus, probably alluding to the grave. The figures are all in the round, or high relief, and for the most part detached from the field: the delicacy of the carving and the high and finished style of the workmanship testify to the ability and skill of the workman, and recall the beautiful productions of the Italian school of the seventeenth century. Mr. J. Newton suggested that the female is the woman of seven stars mentioned in the Apocalypse, and that the supposed coffin is an altar with cherubim near it; adding that he had seen several pieces by Albert Dürer not unlike this, illustrative of Apocalyptic scenes.

By the Chairman. A fragment of pottery, a spear-head and a stone hammer, in illustration of his paper.

The following papers were read :—

ON CLAY PIPES; THEIR USES AND FORMS, MAKERS AND DATES,† *by Mr. H. Ecroyd Smith; and* TUMULI AT WINWICK,‡ *by John Robson, M D.*

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* Published in a separate form. † Transactions, p. 209. ‡ Transactions, p. 169.

15th *March*, 1860. SCIENTIFIC SECTION.

REV. HENRY H. HIGGINS, M.A., in the Chair.

The following donations were presented:—

From the Hon. Sir. E. Cust, President. The Booke of the Pylgremage of the Sowle. Translated from the French of Guillaume de Guileville, and printed by William Caxton A.D. 1483, with Illuminations taken from the MS. copy in the British Museum. Edited by Katherine Isabella Cust, 1859. The Ancient Poem of Guillaume de Guileville, entitled Le Pélérinage de l'Homme, compared with the Pilgrim's Progress of John Bunyan, with Illustrations and an Appendix, 1858.

From the Society. Quarterly Journal of the Geological Society, vol. xv, part 5, and vol. xvi, part 1.

From the Society. Journal of the Statistical Society, vol. xxiii, part 1.

From M. de Perthes. A Collection of Articles regarding the works of art found in the Drift, extracted from the *Times* and Journals of various Learned Societies in England and France. De la Femme dans l' Etat Social, de son Travail et de sa Rémuneration, by the Donor.

The following objects of interest were exhibited:—

By the Rev. Dr. Hume. Photograph of the first page of the *Times* on the seal of a finger-ring. Miniatures of Lord Brougham and of a Lady said to be the original of Sir W. Scott's *Minna Troil*. Small figure of a Burmese god in soapstone.

By Mr. Mayer. Several documents of local interest, published in Liverpool within the last hundred years, including copies of the *Liverpool Chronicle* for Thursday, the 17th August, 1769, and *Williamson's Liverpool Advertiser* for Friday, the 20th August, 1773. Fragment of an ornament in stone-ware found January, 1860, in excavating for a wall near the old Potteries in Shaw's Brow.

The following paper was read:—

ON THE NEW THEORY OF SOUND IN REFERENCE TO HEARING, *by Thomas R. Mitchell, M.D.*

19th *April*, 1860. SCIENTIFIC SECTION.

WM. BROWN, Esq., V.P., in the Chair.

Mr. David Elliot Birnie, 53, Upper Warwick Street, was duly elected a member of the Society.

The following donations were presented:—

From the Society. Proceedings and Papers of the Kilkenny and S.E. of Ireland Archæological Society, vol. ii, N.S., Nos. 21, 22, 23 and 24.

From Mr. T. B. Ryder. Journal of the Manchester and Liverpool Agricultural Society for 1860.

From Mr. Banister Lupton, Newcastle-upon-Tyne. A Political Index to the

Distant parts of the country were occasionally supplied with this brittle ware, as is evidenced by the pipes of John Hunt, with his name in full (a rare occurrence) upon the spur, in Staffordshire and in London, as well as in our own neighbourhood at Great Meols. He was probably a Staffordshire man, but it is thought that several members of his family wrought elsewhere—pipes of *Jeffry Hunt* being common in Somerset, and others of *Thomas Hunt* occurring in Wilts. Makers' marks appear on most of the pipes of the 16th and 17th centuries, occasionally on the breast of the bowl, rarely on the stem, but generally on the base of the spur. Aubrey mentions a manufacturer named *Gauntlet*, who impressed his ware with a representation of that article. The trade was sometimes united with others, as at Saffron Walden, in Essex, where in the 17th century we find William Leader making the copper tokens of the period, in addition to clay pipes; and he not improbably also manufactured the curious pins (if they may be so termed), formed likewise of fine pipeclay, and used by barbers of that and the succeeding century for curling the hair. They have often been mistaken for tobacco-stoppers. Many scores of these articles have been found in ledges within chimneys of the older houses in the town, and a few examples have been selected for exhibition, including one bearing the potter's initials, *W.B.* At one period the Winchester pipes appeared to have been in great request, Ben Jonson noticing them as considered the best in his day. Of this, or somewhat earlier date, is the curious article in crockery, termed a *Tantalus, or puzzle cup*, now shown. Though of fair size, it was not calculated for holding above a pint, owing to the thickness of the material and the open ornamentation, which includes a couple of grotesque human faces, devices from cards, the Freemasons' square and compass, and, lastly, a couple of pipes, conveying, rudely formed as they necessarily are, a tolerable idea of the smoking utensils of the day. The cup was emptied by an orifice carried upward through the handle, which terminated in hollow projections on the apex of the vessel, two of them being closed by the fingers, whilst the power of suction was applied to the third. These objects were evidently more for show than use, and usually occupied places on the prominent shelves of public houses. Mr. Joseph Clarke informs me that the older specimens are now but rarely met with. Some were, however, made by Messrs. Wedgewood and Turner in Staffordshire; and others, though very rudely, by another potter of the same county.

By Mr. Marsh. A collection of upwards of 140 engraved portraits of Milton, and various seals, &c., in illustration of his paper.

The following paper was read :—

On the Engraved Portraits and Pretended Portraits of Milton,* *by John F. Marsh, Esq.*

10th May, 1860. LITERARY SECTION.

Wm. Brown, Esq., V.P., in the Chair.

The following gentlemen were duly elected members of the Society :—

Gerard Hornby, 177, Breck Road.
Robert Mills, Shawclough, near Rochdale.

The following donations were presented :—

From the Society. Proceedings of the Royal Society, vol. x, No 38.

From the Society. Report of the Proceedings of the Geological and Polytechnic Society of the West Riding of Yorkshire, 1859.

From Dr. Crace Calvert. On the relative powers of Metals and Alloys to conduct Heat, part i. On the hardness of Metals and Alloys. On the specific gravities of Alloys. On the influence of science on the art of Calico-printing. On the chemical changes which Pig Iron undergoes during its conversion into Wrought Iron. On the purification of polluted streams. On the indiscriminate sale of Poisons.

The following paper was read :—

On Poisons,† *by F. Crace Calvert, Ph. Dr., F.R.S., &c.*

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* Transactions, p. 135. † Transactions, p. 193.

APPENDIX.

26th April, 1860. MISCELLANEOUS MEETING.

JOSEPH MAYER, F.S.A., V.P., in the Chair.

This meeting, held at Mr. Mayer's Museum, Colquitt Street, by invitation of the proprietor, was numerously attended by the members and their friends, including a large number of ladies. During the evening, Mr. Thos. Wright, M.A., &c., Hon. Mem., described the excavations at Wroxeter, the site of the ancient Roman city of Uriconium, explaining by plans the progress of the discoveries up to the present time, and exhibiting specimens of coal, pottery, personal ornaments &c., found on the spot.

At the conclusion of the lecture, a cordial vote of thanks to Mr. Wright for his valuable discourse, and to Mr. Mayer for his kindness in throwing open his museum on the occasion was passed by acclamation.

SPECIAL GENERAL MEETING.

ANNUAL EXCURSION.

The annual excursion took place on Saturday, the 7th July. At eight a.m. a numerous party took their departure by the Birkenhead Railway for Shrewsbury; and on their arrival paid a hasty visit to the town museum, for the purpose of inspecting the numerous relics there deposited, which have recently been found at Wroxeter, the site of the Roman city of Uriconium. The curiosities comprise various articles of personal ornament, fragments of pottery, glass, coins and human remains. The last named objects are of great interest; especially the skulls, dug out near the gate of the city which protected the ford or bridge across the river Severn. Their peculiar interest arises from their being quite different from the usual form; and it has been suggested that they belong to some barbarian tribe who had attacked the city gate and been killed in the action. In some cases the portion over the right eye is considerably in advance of the opposite side, and *vice versa;* whilst, from the circumstance that the sutures are correspondingly irregular, although perfectly closed, great objection is felt to the attempted explanation of these remarkable deformities, that they arose from violence or any other external cause.

From the museum the whole party proceeded in carriages to the excavations now open at Wroxeter, where they spent a considerable time in minutely examining the wonderful scene they present; the exhumed remains of a city reduced to ruins, and deserted 1,400 years ago,—the grand and massive fragment of the city wall, still standing 20 feet above the present surface, the bath, with its tesselated pavement, the hypocaust, the floors paved with lime-ash, or with tiles, and the long lines of foundation walls.

Calling, on the road back, at the interesting little church at Atcham, the party returned to Shrewsbury, and at half past three sat down to dinner at the "Lion," the chair being filled by the Rev. Dr. Hume, supported by Major Egerton Leigh, of High Leigh; Dr. Robson, of Warrington; Dr. Johnson, of Shrewsbury, &c. The usual loyal toasts were succeeded by others referring to the society; and at a quarter to five about half the party took their departure homewards, the remainder staying to explore the ancient borough of Salop, and its picturesque surroundings, until eight, when they returned to Liverpool, after a day of much interest and enjoyment, heightened by the delightful weather.

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